Real Time DVR

SHR-2040/2041/2042 User's Manual

English

Safety Regulations

Please be sure to keep the following in mind for the right use of the product to pre-vent proprietary risk or damage.

■ **Do not use multiple plugs at once.**
- This may cause abnormal heat generation or fire

■ **Do not put a vase, flowerpot, cup, cosmetics, medicine, or vessel with water around you.**
- This may cause fire.

■ **Do not bend the power cord forcibly nor put a heavy material on it.**
- This may cause fire.

■ **Do not touch the power plug with wet hands.**
- This may cause electric shock.

■ **Insert the power plug firmly enough not to shake.**
- This imperfect connection may cause fire.

■ **Keep the product off humidity, dust, or soot.**
- This may cause fire or electric shock.

■ **Do not put metals(coin, hair pin, metal piece, etc.) or inflammable materials(match, paper, etc.) in the ventilation hole.**
- This may cause fire.

■ **Keep the surrounding temperature between 0˚C to 40˚C and keep the product off humidity.**
- This may cause breakdown.

■ **Secure sufficient ventilation.**
- This may cause abnormal operation due to high temperature.

■ **Keep the product off direct ray of light or heat from the heating device**
- This may cause fire.

■ **Do not disassemble, repair, or remodel the product.**
- This may cause fire, electric shock, or injury due to abnormal operation.

■ **Do not pull out the power cord.**
- This may destroy the power cord, eventually, cause fire or electric shock.

■ **Plug out in the event of thunder or lightning.**
- This may cause fire.

■ **Keep your children off the battery after you take it out of the product. They tend to swallow it unconsciously.**
- If your children swallow it, please see the doctor immediately.

■ **Install the product at a safe place or attach the product to the wall or ceiling with a stand firmly enough not to fall to the ground.**
- This may injure people.

Before we start

This User's Manual describes the basic usage of SHR-2040/2041/2042.
This Manual contains all the matters necessary for using SHR-2040/2041/2042 such as brief instruction, part name, function, connecting other equipment, and menu setup of SHR-2040/2041/2042.

- SEC retains the copyright on this User's Manual.
- This User's Manual cannot be copied without SEC's prior written approval.
- We are not liable for any or all losses to the product incurred by your use of non-standard product or violation of User's Manual.
- If you want to open the system case to touch the inside, please consult with an expert who works for the shop where you bought the product.
- You may download open source codes from the following website. (See CCTV Part of http://www.samsung.com)
- Before installing any external device such as external memory or HDD, please check the compatibility of the device with Samsung DVR. The list of the compatible devices with Samsung DVR can be obtained from your vendor.
- Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- The Mains plug is used as a disconnect device and shall stay readily operable at any time.

WARNING

[Battery]
As wrong exchange of the battery in SHR-2040/2041/2042 may cause explosion, you shall use the certified battery for SHR-2040/2041/2042.
The battery specification is as follows.

-Normal Voltage : 3V
-Normal Capacity : 170mAh
-Continuous Standard Load : 0.2mA
-Operating Temperature : -20 to +85˚C (-4 to +185˚F)

CALIFORNIA USA ONLY
This Perchlorate warning applies only to primary CR (Manganese Dioxide) Lithium coin cells in the product sold or distributed ONLY in California USA
"Perchlorate Material - special handling may apply,
See www.dtsc.ca.gov/hazardouswaste/perchlorate."

[System Shutdown]
- Power-off without terminating the system in the System Shutdown menu may incur improper motion like data loss and disk failure. Also it can cause a dysfunction to the hard disk while using the product. Power-off shall be done in the System Shutdown menu.

[Operation warranty temperature]
- Operation warranty temperature of this device is 0°C to 45°C(32°F to 104°F) If the device is left under the warranty temperature for a long time, it cannot be operated. When using the device after leaving for a long time in the low temperature, please use it after keeping in the normal temperature for a few times. Especially the warranty temperature of the embedded HDD is 5°C to 55°C(41°F to 131°F), therefore it cannot be operated in the low temperature.

Standards Approvals

Note : This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance whit the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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Chapter 1
Overview

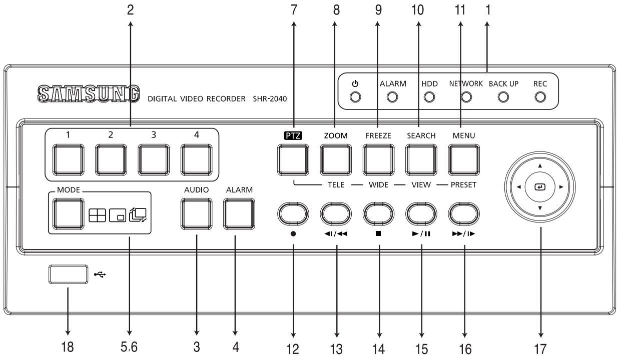
1 Introduction

The Digital Video Recorder(DVR) compresses the 4 channel of camera input data into the MPEG4 video file and the 4 channel of voice input data into the ADPCM audio file in the real time to record them in the Hard Disk or retrieve them from the Hard Disk simultaneously.
In addition, it transfers the Video/Audio out through a network in the real time and it is able to monitor the Video/Audio remotely by your PC.

2 Features

- 4 CH Composite Input Connectors
- NTSC / PAL Video Source Compatible
  (NTSC : SHR-2040 / SHR-2041 / SHR2042,
  SHR-2040N / SHR-2041N / SHR-2042N
  PAL : SHR-2040P / SHR-2041P / SHR2042P)
- Able to record the CIF sized (NTSC-352 x 240 / PAL-352 x 288) video at the speed of 120 ips(NTSC)/100ips(PAL)(Image Per Second)
- 4 CH Loop Through Video Connectors
- Hard Disk Overwrite Mode
- Large Quantity Hard Disk Backup by USB2.0
- Backup function by the USB2.0 memory and exterior CD/DVD writer
  (SHR-2042 supports the internal CD-RW.)
- Able to record, play, and transmit both audio and video files to Windows Network Viewer(Smart Viewer) simultaneously
- Able to record and play the audio 4CH
- Variable Search Mode (Time/Date, Event, Schedule)
- Variable Recording Mode (Time Lapse, Event, Schedule)
- Extended Hard Disk Connection (USB2.0)
- Alarm Interface function (Input : 4, Output : 2, Reset : 1)
- Remote Monitoring function by Windows Network Viewer(Smart Viewer)

3 Part Names and Functions


2
7
8
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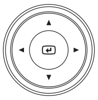
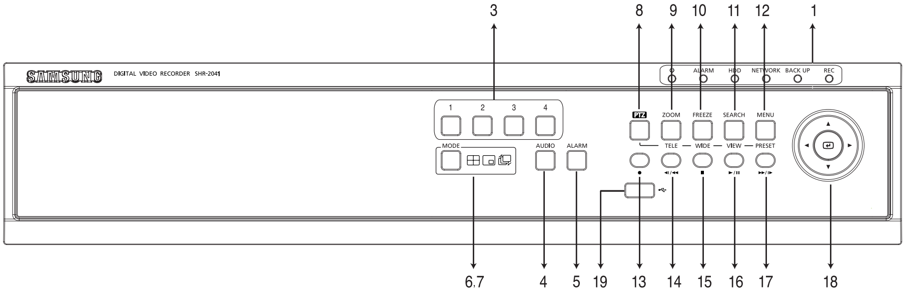
10
11
1
SAMSUNG
DIGITAL VIDEO RECORDER SHR-2040
ALARM
HDD
NETWORK
BACK UP
REC
1
2
3
4
PTZ
ZOOM
FREEZE
SEARCH
MENU
TELE
WIDE
VIEW
PRESET
MODE
AUDIO
ALARM
18
5.6
3
4
12
13
14
15
16
17

[SHR-2040]

No.	Name		Function		
❶	⏻ ○	Power LED	Displays power on/off condition.		
	ALALRM ○	Alarm LED	lights on when an event occurs.		
	HDD ○	HDD Access LED	Displays Normal Access to HDD. Upon Access to HDD, LED repeats on and off.		
	NETWORK ○	Network LED	Displays both network connection and data transmission conditions.		
	BACK UP ○	Backup LED	Displays Back Up Mode.		
	REC ○	Rec LED	Displays the record condition.		
❷	1 4 ☐ ... ☐	Channel Button	Selects a channel in the Single Mode. Used for number input button in the number input mode.		
❸	AUDIO ☐	Audio Setup Button	Sets the Audio On/Off.		
❹	ALARM ☐	Alarm Setup Button	Cancels the alarm when the Alarm button is selected.		
❺	MODE ☐	Split Screen Selection Button	Display Mode	⊞	Displays 4 split screen.
				▣	Displays PIP(Picture in Picture) screen.
				⧉	The single channel screen is changed according to the time set on the menu.
❻	MODE ☐	Mode Selection Button	Search	⊞	Displays 4 split screen.
				▣	Displays both LIVE Channel and Playback Channel in the PIP Screen simultaneously.
				▦	Displays 6 split screen. (1 CH playback screen and 4 CH live screen)
				▦	Displays 9 split screen. (4 CH playback screen and 4 CH live screen)

No.	Name		Function	
❼	PTZ	PTZ Button	Performs the TELE, WIDE, PRESET, and VIEW function.	
❽	ZOOM TELE	ZOOM(TELE) Button	Sets up Digital Zoom(x2). (Performs the TELE function by pressing the PTZ button.)	
❾	FREEZE WIDE	FREEZE(WIDE) Button	Performs the FREEZE function in the DISPLAY Mode. (Performs the WIDE function by pressing the PTZ button.)	
❿	SEARCH VIEW	SEARCH(VIEW) Button	Displays the search method. (Performs the VIEW function by pressing the PTZ button.)	
⓫	MENU PRESET	MENU (PRESET) Button	Displays the system setup menu or enters to the upper menu.(Performs the PRESET setup function by pressing the PTZ.)	
⓬	●	RECORD	Records the record setup set in the normal record mode.	
⓭	◀I/◀◀	Search Function Key	Fast/Step Reverse	Fast Reverse: Used for the fast rewinding search in the playback mode. Step Reverse: Used for the 1 step reverse search during the pause.
⓮	■		STOP	Used for the search stop in the playback mode.
⓯	▶/II		PLAY/PAUSE	Toggles in the playback mode to activate PLAY/PAUSE.
⓰	▶▶/I▶		Fast/Step Forward	Fast Forward: Used for the fast-forwarding search in the playback mode. Step Forward: Used for the 1 step-forwarding search during the pause.
⓱		Direction Button Key	◀	In case of setting the details of Menu, it is used as Direction Key. (For PTZ Operation)
			▲	In case of setting the details of Menu, it increases the value or it is used as Direction Key. (For PTZ Operation)
			▶	In case of setting the details of Menu, it is used as Direction Key. (For PTZ Operation)
			▼	In case of setting the details of Menu, it decreases the value or it is used as Direction Key. (For PTZ Operation)
			↵	Acts as the Enter key for the menu setup.
⓲		USB Port	Connects the USB type device.	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8
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10
11
12
1
SAMSUNG
DIGITAL VIDEO RECORDER SHR-2041
ALARM
HDD
NETWORK
BACK UP
REC
1
2
3
4
MODE
AUDIO
ALARM
PTZ
ZOOM
FREEZE
SEARCH
MENU
TELE
WIDE
VIEW
PRESET
6.7
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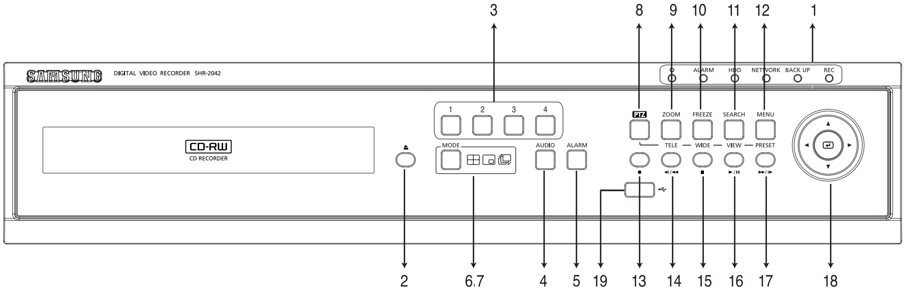
[SHR-2041]


3
8
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11
12
1
SAMSUNG
DIGITAL VIDEO RECORDER SHR-2042
ALARM
HDD
NETWORK
BACK UP
REC
CD-RW
CD RECORDER
1
2
3
4
MODE
AUDIO
ALARM
PTZ
ZOOM
FREEZE
SEARCH
MENU
TELE
WIDE
VIEW
PRESET
2
6.7
4
5
19
13
14
15
16
17
18

[SHR-2042]

No.	Name		Function		
❶	⏻ ○	Power LED	Displays power on/off condition.		
	ALALRM ○	Alarm LED	lights on when an event occurs.		
	HDD ○	HDD Access LED	Displays Normal Access to HDD. Upon Access to HDD, LED repeats on and off.		
	NETWORK ○	Network LED	Displays both network connection and data transmission conditions.		
	BACK UP ○	Backup LED	Displays Back Up Mode.		
	REC ○	Rec LED	Displays the record condition.		
❷	⏏ ○	Eject Button	Performs the OPEN/CLOSE of CD/RW.		
❸	1 ☐ … 4 ☐	Channel Button	Selects a channel in the Single Mode. Used for number input button in the number input mode.		
❹	AUDIO ☐	Audio Setup Button	Sets the Audio On/Off.		
❺	ALARM ☐	Alarm Setup Button	Turns off the alarm LED and stops the sound when an alarm is issued. Alarm icon disappears when the alarm button is used.		
❻	MODE ☐	Split Screen Selection Button	Display Mode	⊞	Displays 4 split screen.
				▣	Displays PIP(Picture in Picture) screen.
				⧉	Auto Sequence Mode: The single channel screen is changed according to the time set on the menu.

No.	Name		Function		
❼	MODE	Mode Selection Button	Search	⊞	Displays 4 split screen.
				☐	Displays the selected channel to the Single Mode
				⧈	Displays both LIVE Channel and Playback Channel in the PIP Screen simultaneously.
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⓬	MENU PRESET	MENU (PRESET) Button	Displays the system setup menu or enters to the upper menu.(Performs the PRESET setup function by pressing the PTZ.)		
⓭	●	RECORD	Records the record setup set in the normal record mode.		
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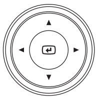
⓱	►►/I►		Fast / Step Forward		Fast Forward: Used for the fast-forwarding search in the playback mode. Step Forward: Used for the 1 step-forwarding search during the pause.
⓲		Direction Button Key	◀		In case of setting the details of Menu, it is used as Direction Key. (For PTZ Operation)
			▲		In case of setting the details of Menu, it increases the value or it is used as Direction Key. (For PTZ Operation)
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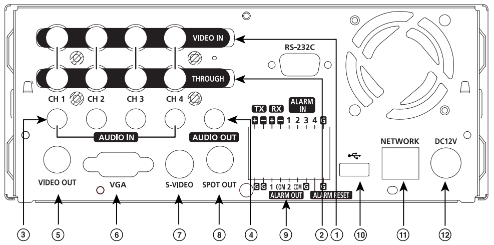
			↵		Acts as the Enter key for the menu setup.
⓳	⭠	USB Port	Connects the USB type device.		


VIDEO IN
RS-232C
THROUGH
CH 1
CH 2
CH 3
CH 4
TX
RX
ALARM IN
1 2 3 4
AUDIO IN
AUDIO OUT
NETWORK
DC12V
VIDEO OUT
VGA
S-VIDEO
SPOT OUT
1 COM 2 COM
ALARM OUT
ALARM RESET
③
⑤
⑥
⑦
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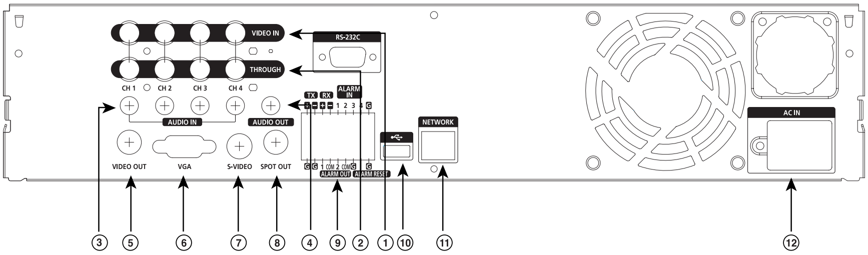
[SHR-2040]

Caution

Do not play DVR on the carpet or other soft material to prevent clogging of the air ventilator. To play DVR on the cabinet or rack, be sure to check the ventilation condition.

No.	Name	Function
❶	**VIDEO IN**	Composite Video Signal Input Port (BNC Style Connector)
❷	**THROUGH**	You may use THROUGH port to transmit a video signal to the other video equipment.
❸	**AUDIO IN**	Audio Signal Input Port (RCA Jack)
❹	**AUDIO OUT**	Audio Signal Output Port (RCA Jack)
❺	**VIDEO OUT**	Composite Video Signal Output Port (BNC Style Connector)
❻	**VGA**	VGA Video Signal Output Port
❼	**S-VIDEO**	S-VIDEO Video Signal Output Port
❽	**SPOT OUT**	SPOT Out Output Port (BNC Style Connector)
❾	**ALARM**	- ALARM IN 1~4 : Alarm Input Port - ALARM RESET IN : Alarm Reset Port - ALARM OUT1~2 : Alarm Output Port - TX+, TX-, RX+, RX- : RS-485 Communication
❿	**USB**	USB connection Port
⓫	**NETWORK**	Network Connection Port
⓬	**DC-IN**	12V Power Socket Support


VIDEO IN
THROUGH
RS-232C
CH 1
CH 2
CH 3
CH 4
TX
RX
ALARM IN
1 2 3 4
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AUDIO IN
AUDIO OUT
NETWORK
AC IN
VIDEO OUT
VGA
S-VIDEO
SPOT OUT
G G 1 COM 2 COM G G
ALARM OUT
ALARM RESET
③
⑤
⑥
⑦
⑧
④
⑨
②
①
⑩
⑪
⑫

[SHR-2041/2042]

⚠ Caution

Do not play DVR on the carpet or other soft material to prevent clogging of the air ventilator. To play DVR on the cabinet or rack, be sure to check the ventilation condition.

No.	Name	Function
❶	**VIDEO IN**	Composite Video Signal Input Port (BNC Style Connector)
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❻	**VGA**	VGA Video Signal Output Port
❼	**S-VIDEO**	S-VIDEO Video Signal Output Port
❽	**SPOT OUT**	SPOT Out Output Port (BNC Style Connector)
❾	**ALARM**	- ALARM IN 1~4 : Alarm Input Port - ALARM RESET IN : Alarm Reset Port - ALARM OUT1~2 : Alarm Output Port - TX+, TX-, RX+, RX- : RS-485 Communication
❿	**USB**	USB connection Port
⓫	**NETWORK**	Network Connection Port
⓬	**AC-IN**	(NTSC) AC 110~220V Power Socket Support (PAL) AC 100~230V Power Socket Support

Chapter 2

Installation

1

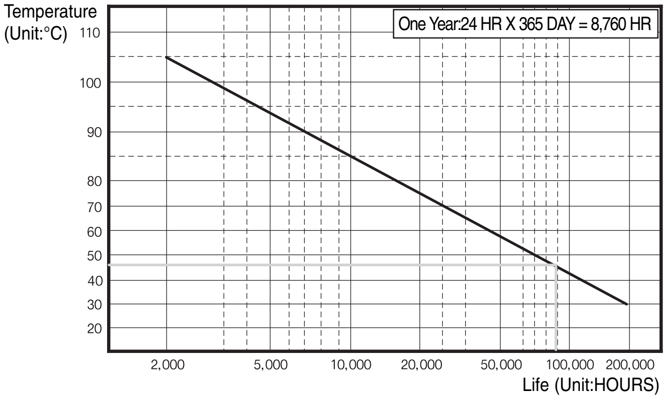
Installation Environment Setup

Do not play DVR on the carpet or other soft material to prevent clogging of the air ventilator.
To play DVR on the cabinet or rack, be sure to check the ventilation condition.

You should pay attention to the following before you use the product.

1. ***Do not use it outdoor.***
2. ***Do not let water or liquid in the connection part or the product itself.***
3. ***Do not impose excessive shock or force.***
4. ***Do not pull out the power plug unreasonably.***
5. ***Do not disassemble the product on your own.***
6. ***Do not exceed the rated input or output range.***
7. ***Use certified power cord only.***
8. ***Use the power cord with a ground for the product with an input ground.***

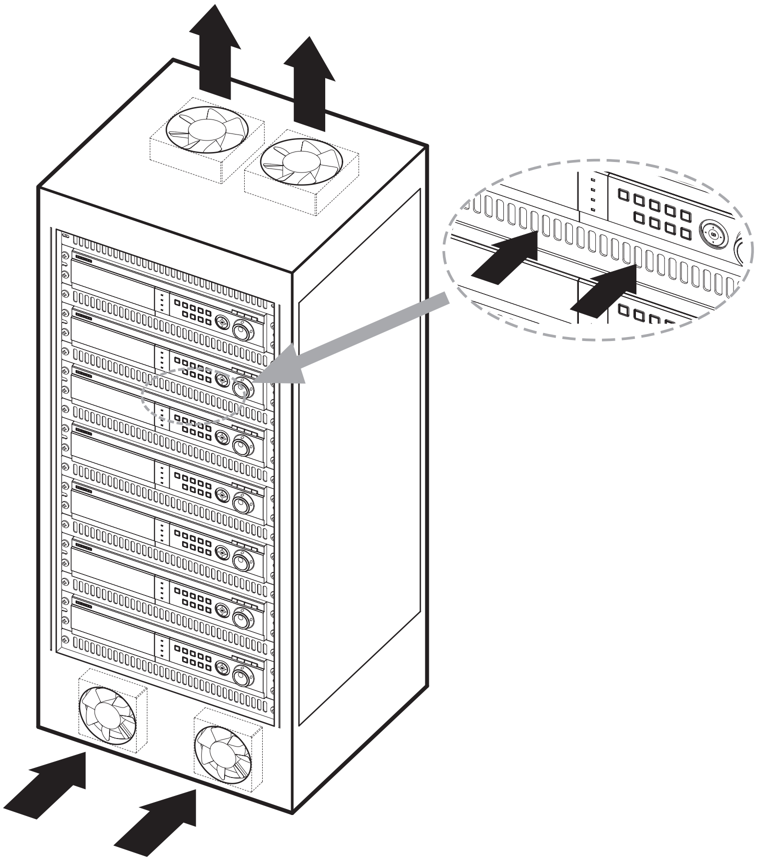
Samsung Digital Video Recorder (hereafter "DVR") is a high-tech security equipment that contains a high-capacity HDD and top-notch circuits. High temperature inside or outside of the product may cause reduced life and deteriorated performance (see graph 1 below), leading to a malfunction. So please follow the instructions below to proceed with the installation.



<Graph 1 : Correlation between temperature and product life>

<Instructions for the rack mounting of Samsung DVR>

1. The rack on which the DVR is mounted should not be sealed off.
2. And it also can allow air circulation through the vent.
3. As in the figure to the right, we recommend the product should be stacked up with other DVRs or rack-mounting devices at a certain space or you install a vent system to accommodate airflow.
4. For forming a natural convection, the air intake hole should be positioned at the bottom and the emission at the top.
5. We recommend you install each of the air intake and emission holes with a fan motor for sufficient airflow.
   (The air intake fan should be equipped with a filter to block dust and other impurities from inflow.)
6. The temperature inside the rack and around the DVR should stay between 0°C and 40°C (32°F and 104°F).

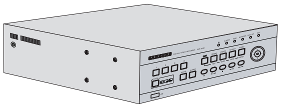


2

Checking Product & Accessory

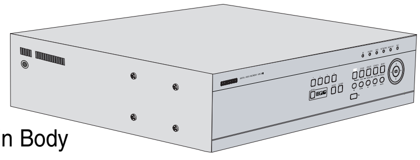
Upon delivery of a product, you shall unwrap the product and put it on the even floor or where you want to use it. Then you shall check if the following items are in it.

- Main Body
- User's Manual
- One Power Cord
- Two Brackets
  - These are not supplied in SHR-2040.
  - Brackets are used to attach the product to the rack.
- Smart Viewer Software CD (PDF Manual included)
- Special Screws
  - SHR-2041 : SCREW-SPECIAL 12EA
  - SHR-2042 : SCREW-SPECIAL 4EA
  - SHR-2040 : SCREW 4EA (Code : 6001-000742)
  - Please keep special screws for HDD addition.
- 2 EA of RS-485/Alarm Terminal Block



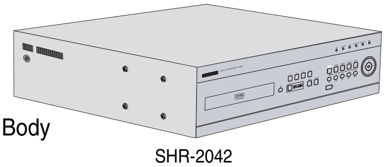
Main Body

SHR-2040



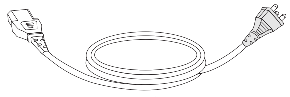
Main Body

SHR-2041

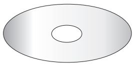


Main Body

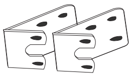
SHR-2042



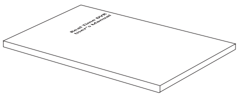
Power Cord



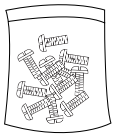
CD



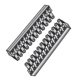
Bracket



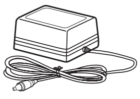
User's Manual



Screw



RS-485/Alarm
Terminal Block



Adapter
(Only 2040)

WARNING) SHR-2040 set must use the adapter we provide.
Adapter : ADP-5412

3

HDD Addition

Caution

[Checking HDD Data]
Please, pay attention to Following information to minimize the chance of losing HDD data.
- *Remember that you should protect HDD from any impact or misuse as this may cause damaged.*
- *The Manufacturer is not responsible for missing data or defects caused by the user's mishandling.*

Note: Adding Extra HDD. Check in advance that the HDD is compatible with the manufacturer's DVR.

Examples that can cause loss of data or damage HDD.
- *Any outside Impact on the case which could happen whilst disassembling or setting up the DVR.*
- *Power cut or incorrect shutdown whilst the DVR is operating.*
- *Refer to page 5-11 : how to turn off DVR*
- *Moving or causing any impact on the DVR during operation. Please, back up events as soon as possible to minimize disappointment should HDD data be lost.*

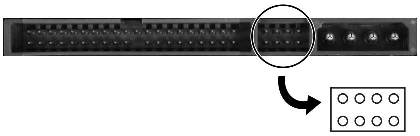
SHR-2040 HDD ADDITION

The user can add 1 HDD to this product. However, there are many factors that can cause electrical shock, accidents, and malfunctioning of the device inside of the product. When the user does not correctly install or apply the proper settings, the device may not recognize the HDD or the device will not run. Therefore, before adding any HDDs, it is recommended that the user contacts a specialist where they purchased the product.

[Caution when adding a HDD]

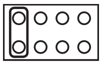
- ■ When adding HDDs, pay attention so that the cable doesn't get caught between unsuitable places or the cable's insulation doesn't come off. (This may cause a malfunction or fire.)
- ■ When adding HDDs, be careful not to receive any injury from the pointed edges inside the product.
- ■ Pay attention so as not to lose the disassembled screws or accessories.
  If the screws or accessories are not put together, the product will either malfunction or won't be able to operate.
- ■ Check the compatibility list of HDDs before installing additional HDDs. The list of the compatible devices with Samsung DVR can be obtained from your vendor.
- ■ If you contact the RTC battery while adding hard disks, the battery failure may happen. In this case, you will encounter failures when setting the time and operating DVR.
- ■ If you don't connect fan power cables after adding hard disks, the fan failure message appears on the screen. This can cause operation failures because it raises the temperature inside your DVR.

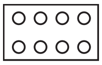
[Setting the Jumper]



The jumper setting method is illustrated on the surface of the purchased HDD.
Using SAMSUNG hard disk, the jumper setting method is as follows:

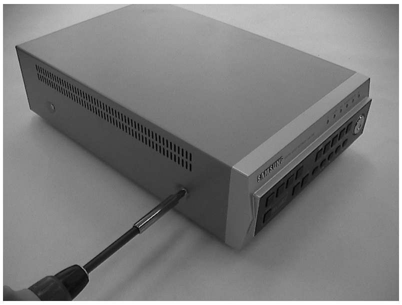
• HDD jumper for Primary Master and Primary Slave.

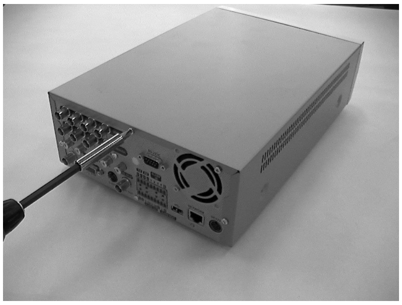




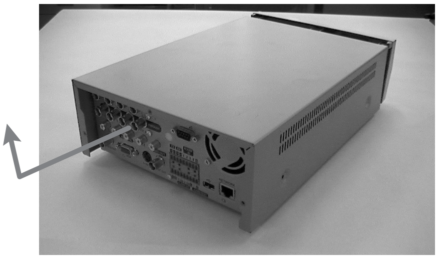
[How to Add a HDD]

1. To remove the product's cover, take out the screws on the left and right sides (2 spots each) and on the back (3 spots).

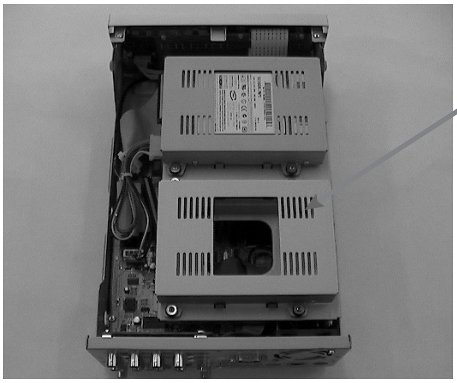


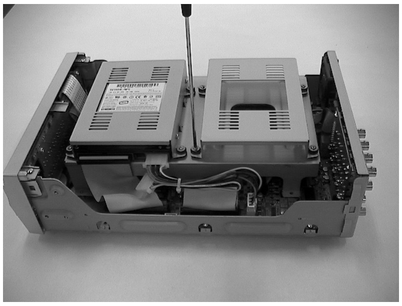


2. Remove the cover from the product. (Remove the cover by first lifting its back part upward after sliding the cover slightly backward.)

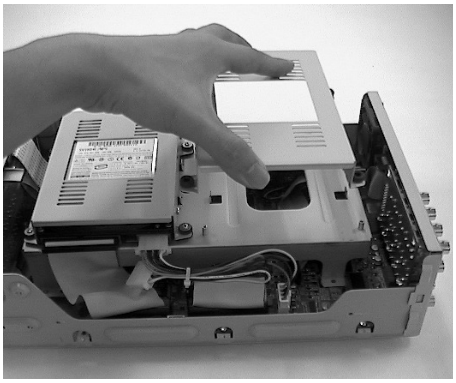


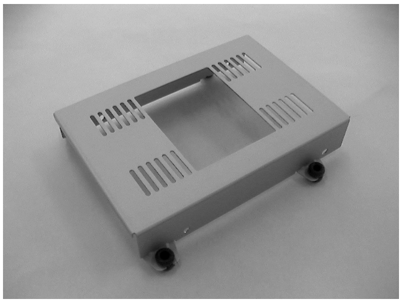
3. There is bracket-HDD mounted on the back where you can mount a HDD, and you have to remove the screws (4 spots) that are holding the bracket that you want to mount an HDD onto.



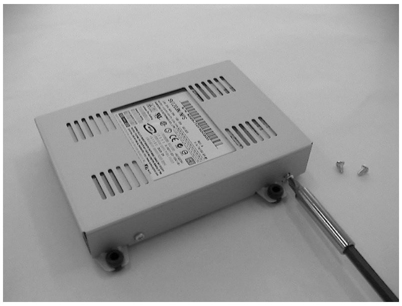


4. Remove the bracket-HDD from the product by lifting it upward from the product.

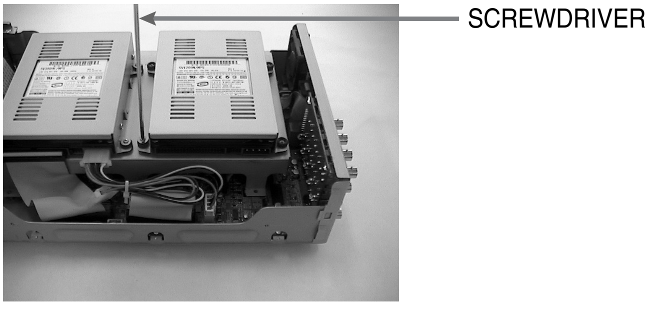




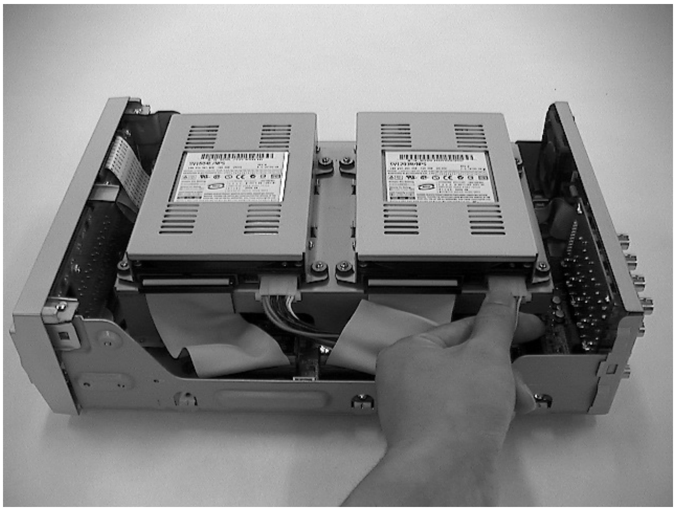
5. Mount the HDD to the bracket-HDD with the SCREW-TAPTITE (BW, +, S, M3, L6, ZPC) (4 spots) that was provided as an accessory. (The screws have to be tightened so that it doesn't vibrate loose.)



6. Re-mount the built-in HDD bracket-HDD to the place where it was separated from. The work order for mounting the BRACKET-HDD is in reverse from when disassembling it. Tighten the screw after the BRACKET-HDD's mounting holes are perfectly aligned with four mounting spots on the bottom.)



7. Make sure that the bracket-HDD is mounted stably inside the product, then connect the power supply cable and signal transmission cable (IDE cable) to the HDD.



8. Check if there is any problem with connector or wiring inside of the product for connecting and mounting then close the cover.

9. Tighten cover mounting screws. (The left and right side each has 2 spots and the back side has 3 spots)

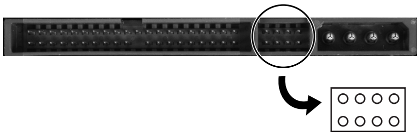
SHR-2041 HDD ADDITION

The user can add 3 HDDs to this product.
However, there are many factors that can cause electrical shock, accidents, and malfunctioning of the device inside of the product. When the user does not correctly install or apply the proper settings, the device may not recognize the HDD or the device will not run. Therefore, before adding any HDDs, it is recommended that the user contacts a specialist where you purchased the product.

[Caution when adding a HDD]

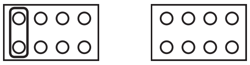
- When adding HDDs, pay attention so that the cable doesn't get caught between unsuitable places or the cable's insulation doesn't come off. (This may cause a malfunction or fire.)
- When adding HDDs, be careful not to receive any injury from the pointed edges inside the product.
- Pay attention so as not to lose the disassembled screws or accessories. If the screws or accessories are not put together, the product will either malfunction or will be inoperable.
- Check the compatibility list of HDDs before installing additional HDDs. The list of the compatible devices with Samsung DVR can be obtained from your vendor.
- If you contact the RTC battery while adding hard disks, the battery failure may happen. In this case, you will encounter failures when setting the time and operating DVR.
- If you don't connect fan power cables after adding hard disks, the fan failure message appears on the screen. This can cause operation failures because it raises the temperature inside your DVR.

[Setting the Jumper]

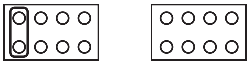


The jumper setting method is illustrated on the surface of the purchased HDD.
Using SAMSUNG hard disk, the jumper setting method is as follows:

- HDD jumper for Primary Master and Primary Slave.



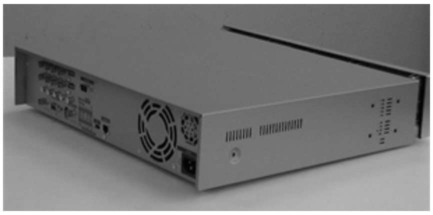
- Jumper setting for Secondary Master and Secondary Slave.



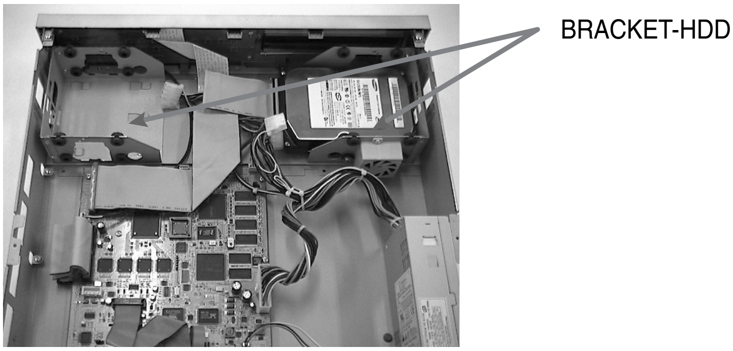
[How to Add a HDD]

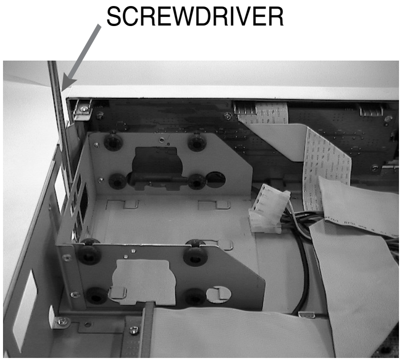
1. To remove the product's cover, take out the screws on the left and right sides (5 spots each) and on the back (1 spot).

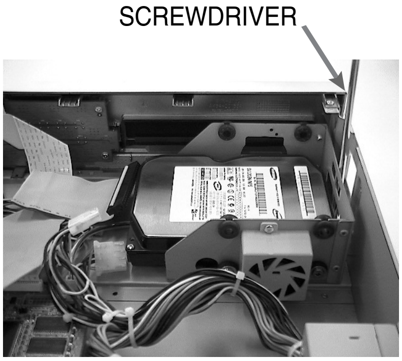
2. Remove the cover from the product. (Remove the cover by first lifting its back part upward after sliding the cover slightly backward.)



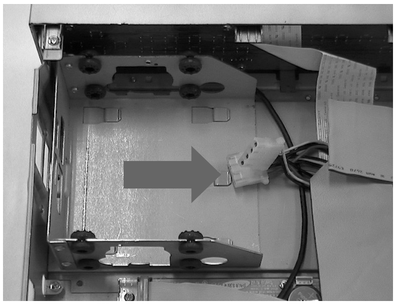
3. There is a bracket (bracket-HDD) mounted on the right and left sides where you can mount the HDD, and you have to remove the screws that are holding the bracket that you want to mount an HDD onto.

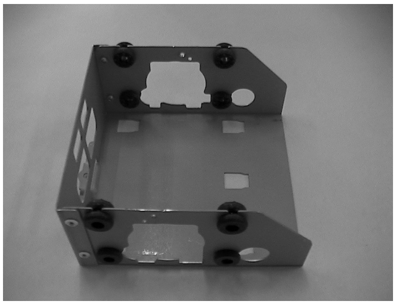


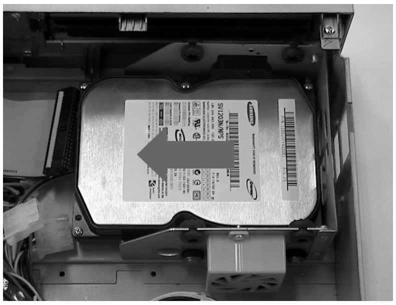


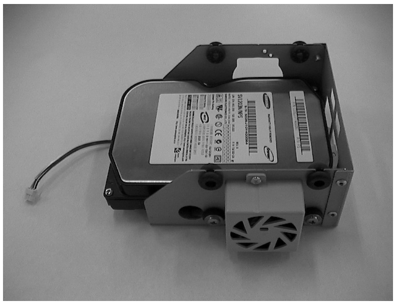


4. Remove the bracket-HDD from the product by separating the power supply cable, signal transmission cable (IDE cable), and fan cable then pulling it toward the center of the product to separate its fixed part from the bottom.

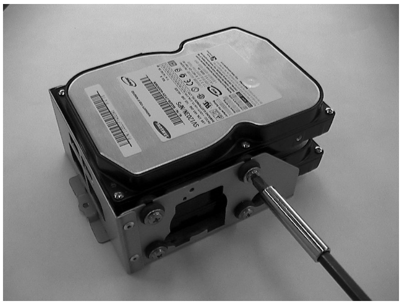




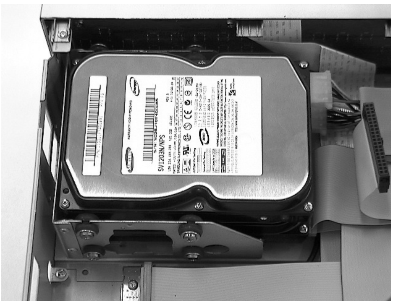


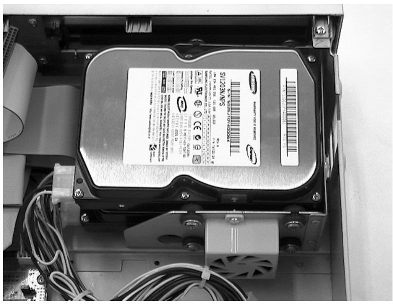


5. Mount the HDD to the bracket-HDD with the SCREW-SPECIAL (BWH, 6-32UNC, L10.5) (4 spots) that was provided as an accessory. (The screws have to be tightened so that it doesn't vibrate loose.)

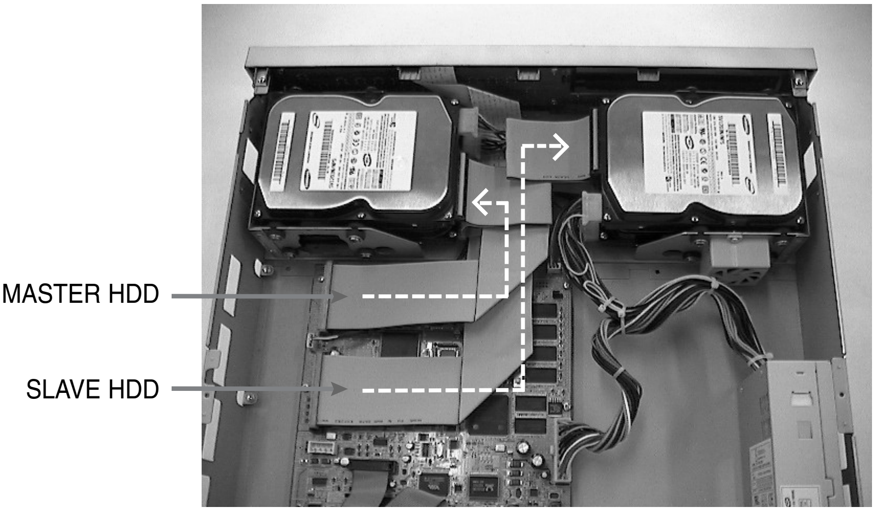


6. Re-mount the built-in HDD bracket-HDD to the place where it was separated from.
   Place the bracket-HDD so that all five mounting spots on the bottom and the bracket-HDD's mounting holes are perfectly aligned, then slide it toward the outside of the product and tigh ten the screws.





7. Make sure that the bracket-HDD is mounted stably inside of the product, then connect the power supply cable, signal transmission cable (IDE cable), and fan cable to the HDD.



8. Check if there is any problem with connector or wiring inside of the product for connecting and mounting then close the cover.
9. Tighten cover mounting screws. (The left and right side each has 5 spots and the back side has 1 spot)

Caution

When mounting an additional HDD, the primary master has to be mounted.

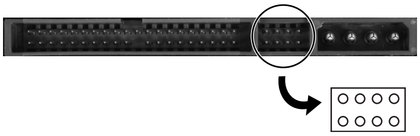
SHR-2042 HDD ADDITION

The user can add up to 2 HDDs to this product.
However, there are many factors that can cause electrical shock, accidents, and malfunctioning of the device inside of the product. When the user does not correctly install or apply the proper settings, the device may not recognize the HDD or the device will not run. Therefore, before adding any HDDs, it is recommended that the user contacts a specialist where they purchased the product.

[Caution when adding a HDD]

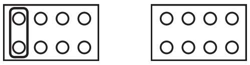
- ■ When adding HDDs, pay attention so that the cable doesn't get caught between unsuitable places or the cable's insulation doesn't come off. (This may cause a malfunction or fire.)
- ■ When adding HDDs, be careful not to receive any injury from the pointed edges inside the product.
- ■ Pay attention so as not to lose the disassembled screws or accessories. If the screws or accessories are not put together, the product will either malfunction or will be inop erable.
- ■ Check the compatibility list of HDDs before installing additional HDDs. The list of the compatible devices with Samsung DVR can be obtained from your vendor.
- ■ If you contact the RTC battery while adding hard disks, the battery failure may happen. In this case, you will encounter failures when setting the time and operating DVR.
- ■ If you don't connect fan power cables after adding hard disks, the fan failure message appears on the screen. This can cause operation failures because it raises the temperature inside your DVR.

[Setting the Jumper]

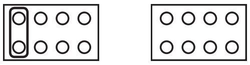


The jumper setting method is illustrated on the surface of the purchased HDD.
Using SAMSUNG hard disk, the jumper setting method is as follows:

• HDD jumper for Primary Master and Primary Slave.



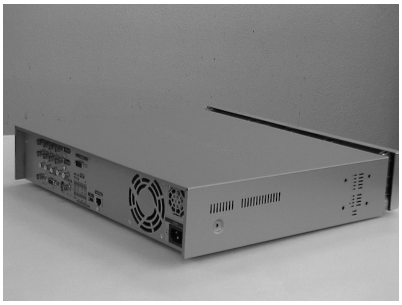
• Jumper setting for Secondary Master (CD-RW) and Secondary Slave.



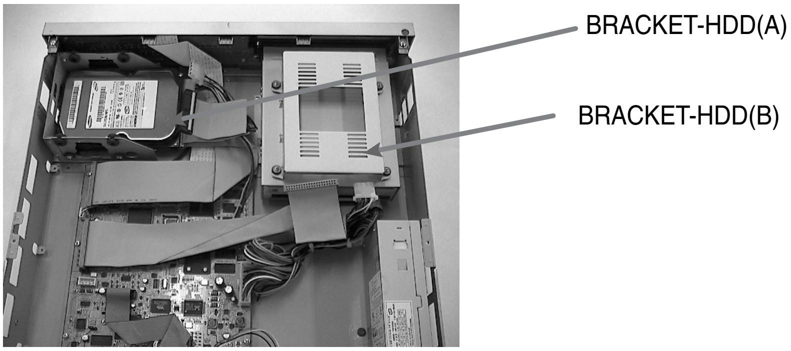
[How to Add a HDD]

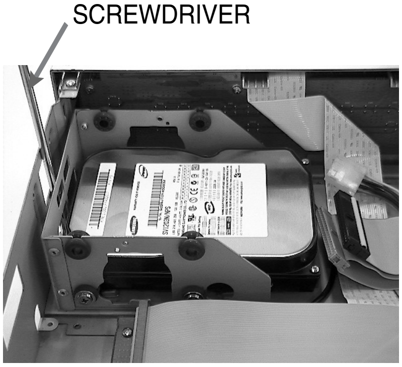
1. To remove the product's cover, take out the screws on the left and right sides (5 spots each) and on the back (1 spot).

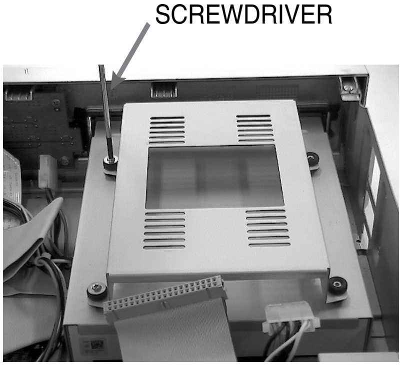
2. Remove the cover from the product. (Remove the cover by first lifting its back part upward after sliding the cover slightly backward.)



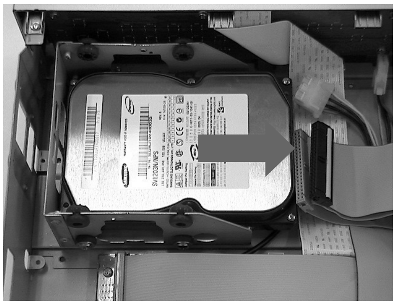
3. There is a bracket (bracket-HDD) mounted on the right and left sides where you can mount the HDD, and you have to remove the screws that are holding the bracket that you want to mount an HDD onto.

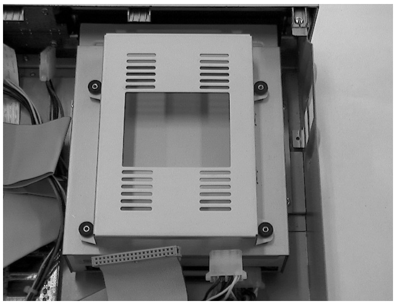

BRACKET-HDD(A)
BRACKET-HDD(B)

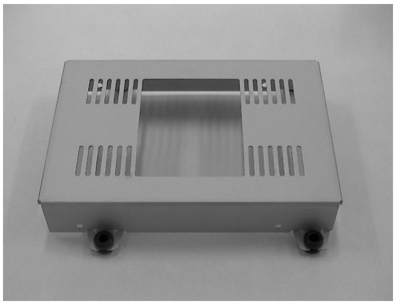

SCREWDRIVER


SCREWDRIVER

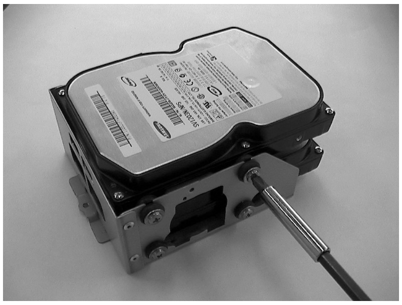
4. Remove the bracket-HDD (A) from the product by disconnecting the power supply cable, signal transmission cable (IDE cable), and fan cable then pulling it toward the center of the product to disconnect its fixed part from the bottom. Remove the bracket-HDD (B) by lifting it up after removing the screws.

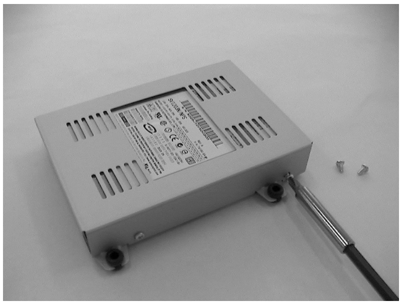




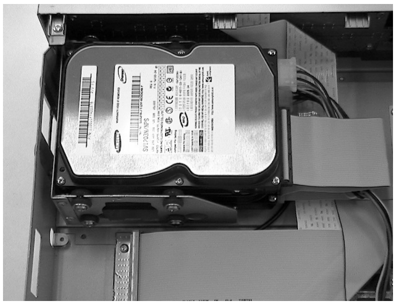


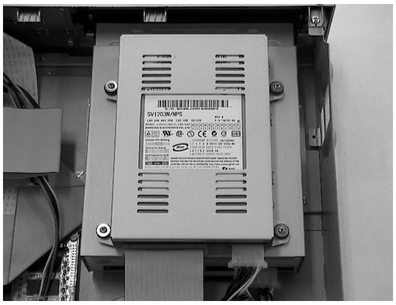
5. Mount the HDD to the bracket-HDD with the (A)SCREW-SPECIAL (BWH,6-32UNC,L10.5) and (B)SCREW-TAPTITE (BH,+,S,M3,L6,ZPC) (4 spots) that was provided as an accessory. (The screws have to be tightened so that it doesn't vibrate loose.)



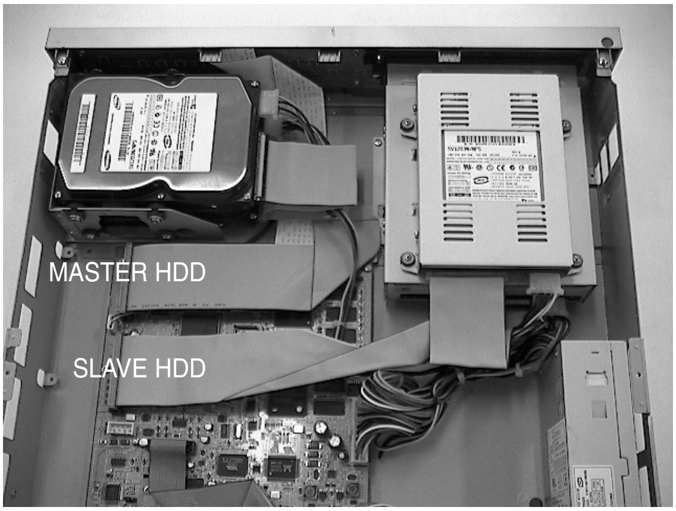


6. Re-mount the built-in HDD bracket-HDD to the place where it was removed from.
   Place the bracket-HDD(A) so that all the five fixing areas in the bottom and the bracket-HDD's fixing holes can perfectly aligned, then slide it outward of the product and tighten the screws. For the bracket-HDD (B), place it so that all the four fixed areas at the bottom and the bracket-HDD's fixed holes can perfectly aligned, then tighten the screws.)





7. Make sure that the bracket-HDD is mounted stably inside of the product, then connect the power supply cable and signal transmission cable (IDE cable) to the HDD.



8. Check if there is any problem with connector or wiring inside of the product for connecting and mounting then close the cover.

9. Tighten cover mounting screws. (The left and right side each has 5 spots and back side has 1 spot)

⚠ Caution

When mounting an additional HDD, the primary master has to be mounted.
The HDD has to be set as the primary master, and the CD-RW has to be set as the secondary master.
When adding a HDD, please add the same kind of HDD that you used for this product.
For HDD addition, please select the same HDD with the existing HDD fixed to the product as far as possible.

- ***Jumper settings when mounting 2 SHR-2040 HDDs***
  Due to the limited space, set the jumper for both HDDs to the master mode for the SHR-2040.

→ 1st HDD : Master mode (Primary IDE Cable),
2nd HDD : Master mode (Secondary IDE Cable)

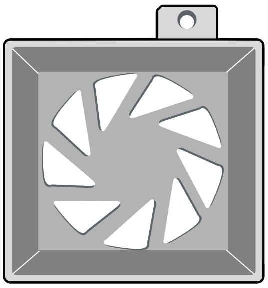
- ***Extra precaution is necessary for the SHR-2042. The built-in CD-RW is set up as the secondary mater.***

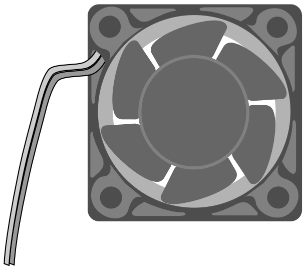
→ 1st HDD : Master mode (Primary IDE Cable),
2nd HDD : Slave mode (Primary IDE Cable),
3rd HDD : Slave Mode (Secondary IDE Cable)The internal CD-RW is connected to the secondary master.) respectively

Both HDDs attached to Primary Slot and Secondary Slot should be set to Master and Slave respectively. Refer to User's Manual for Master or Slave Jumper Setting.
In the event of only one HDD installation, it shall be inserted into the Primary slot.

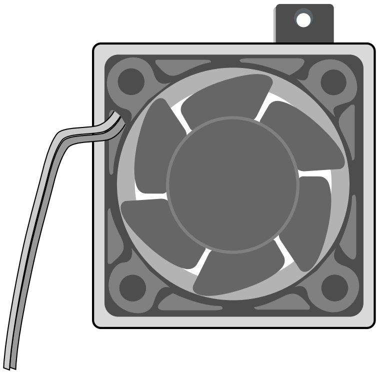
WARNING

① Regarding the sub fan, you need additional brackets and sub fans as follows.
The sub fan is shaped like this when viewed from the front and back. Please pay attention to the fan direction to let wind go through the fan.

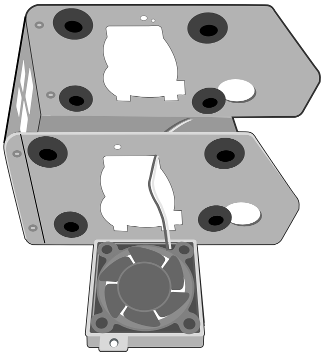


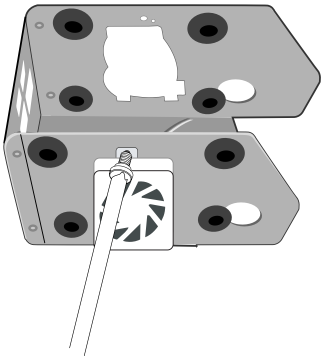


② Fix the fan as follows

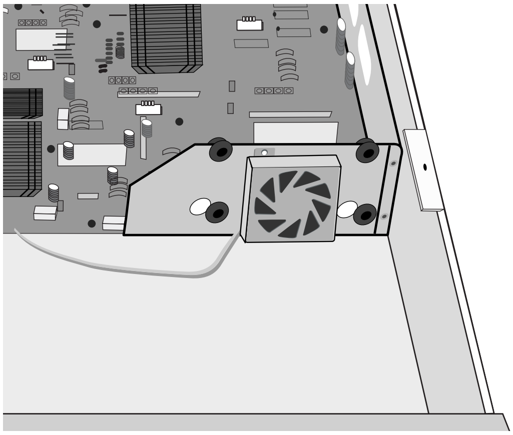


③ Please install the fan which is seen at the right from the front view of SHR-set as follows.



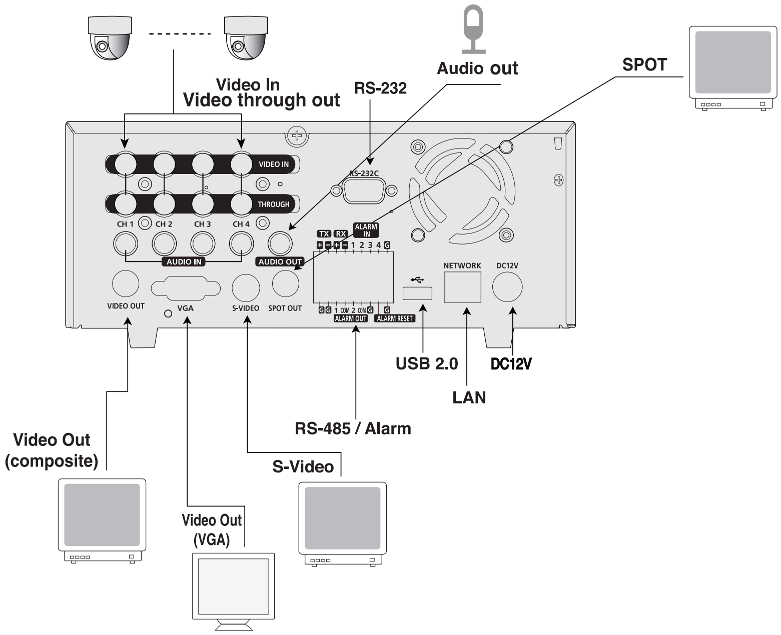


④ The cable should be out from the left hole.

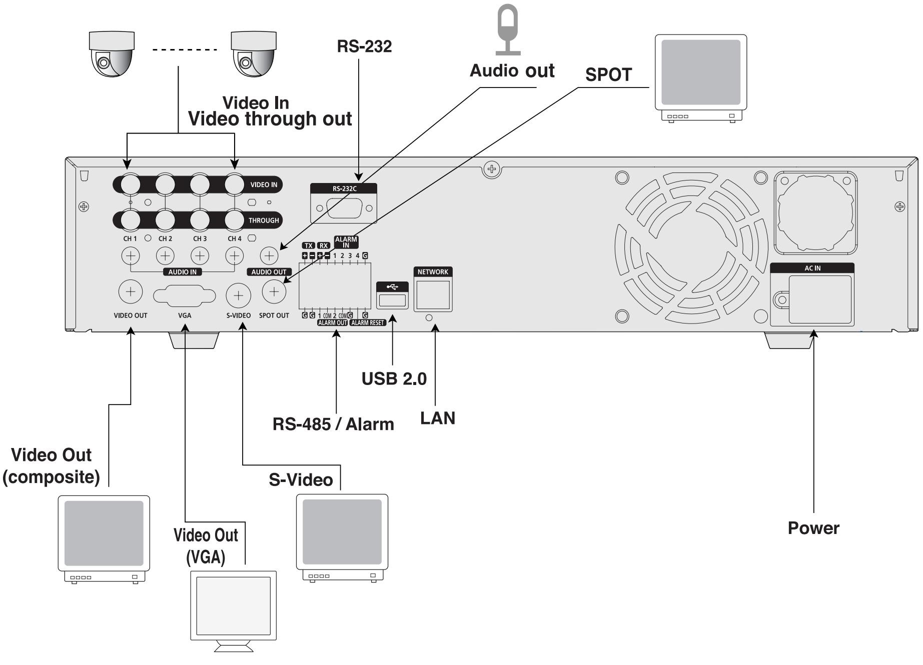


Chapter 3
Connecting with other device

1 Connecting the Video, Audio, and Monitor


Video In
Video through out
RS-232
Audio out
SPOT
VIDEO IN
THROUGH
RS-232C
CH 1
CH 2
CH 3
CH 4
AUDIO IN
AUDIO OUT
TX
RX
ALARM IN
1 2 3 4 G
VIDEO OUT
VGA
S-VIDEO
SPOT OUT
ALARM OUT
ALARM RESET
NETWORK
DC12V
USB 2.0
DC12V
LAN
RS-485 / Alarm
Video Out
(composite)
S-Video
Video Out
(VGA)

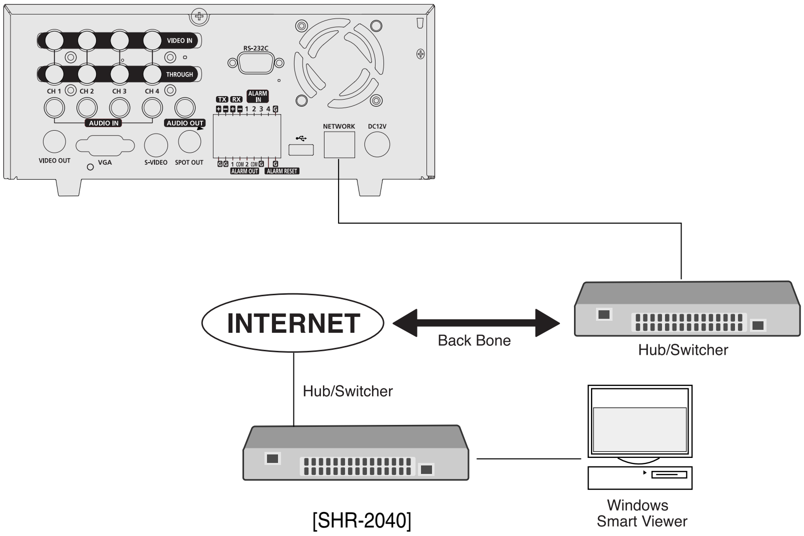
[SHR-2040]


RS-232
Audio out
SPOT
Video In
Video through out
VIDEO IN
THROUGH
RS-232C
CH 1
CH 2
CH 3
CH 4
TX
RX
ALARM IN
1 2 3 4
AUDIO IN
AUDIO OUT
NETWORK
AC IN
VIDEO OUT
VGA
S-VIDEO
SPOT OUT
ALARM OUT
ALARM RESET
USB 2.0
RS-485 / Alarm
LAN
Video Out
(composite)
S-Video
Video Out
(VGA)
Power

[SHR-2041/2042]

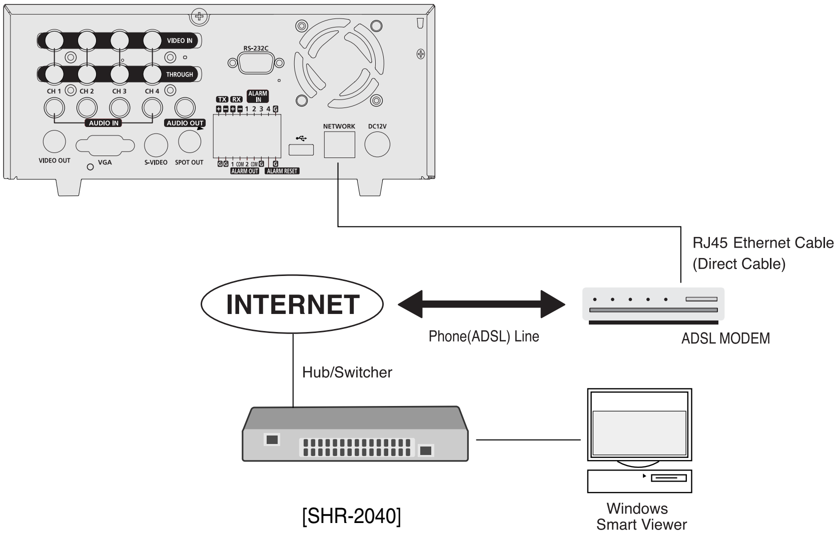
2 Connecting the Network

- Connecting to Internet through Ethernet(10/100BaseT)


VIDEO IN
THROUGH
RS-232C
CH 1
CH 2
CH 3
CH 4
AUDIO IN
AUDIO OUT
TX
RX
ALARM IN
NETWORK
DC12V
VIDEO OUT
VGA
S-VIDEO
SPOT OUT
ALARM OUT
ALARM RESET
INTERNET
Back Bone
Hub/Switcher
Hub/Switcher
Windows Smart Viewer

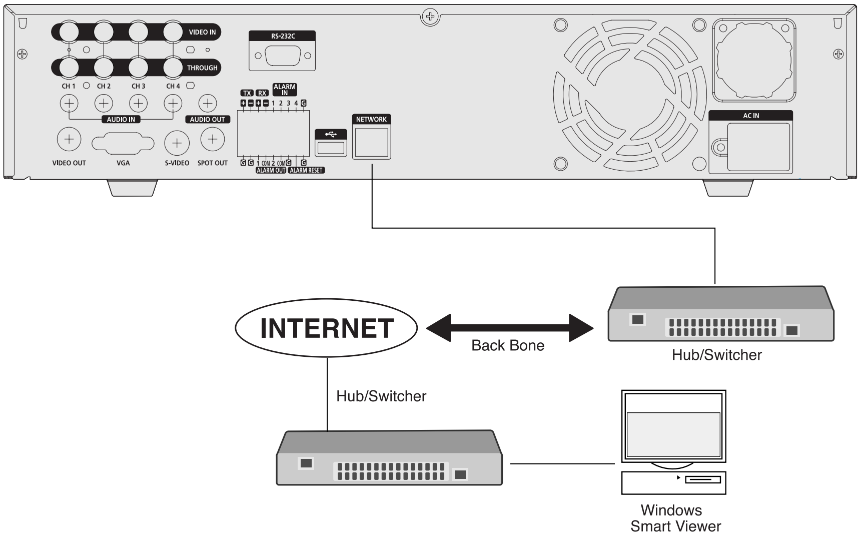
[SHR-2040]

- Connecting to Internet through ADSL


VIDEO IN
THROUGH
RS-232C
CH 1
CH 2
CH 3
CH 4
AUDIO IN
AUDIO OUT
TX
RX
ALARM IN
NETWORK
DC12V
VIDEO OUT
VGA
S-VIDEO
SPOT OUT
ALARM OUT
ALARM RESET
RJ45 Ethernet Cable (Direct Cable)
INTERNET
Phone(ADSL) Line
ADSL MODEM
Hub/Switcher
Windows Smart Viewer

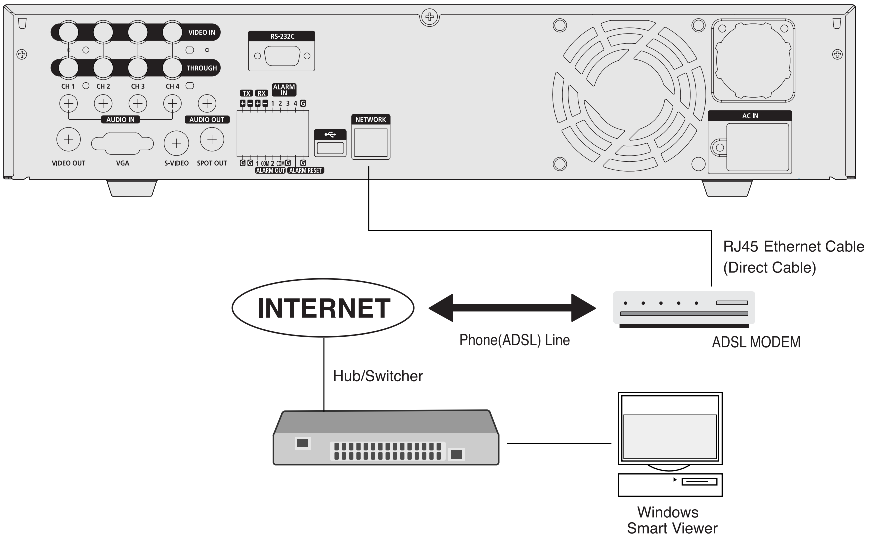
[SHR-2040]

- Connecting to Internet through Ethernet(10/100BaseT)


VIDEO IN
THROUGH
CH 1
CH 2
CH 3
CH 4
AUDIO IN
AUDIO OUT
VIDEO OUT
VGA
S-VIDEO
SPOT OUT
RS-232C
TX
RX
ALARM IN
ALARM OUT
ALARM RESET
NETWORK
AC IN
INTERNET
Back Bone
Hub/Switcher
Hub/Switcher
Windows
Smart Viewer

[SHR-2041/2042]

- Connecting to Internet through ADSL


VIDEO IN
THROUGH
CH 1
CH 2
CH 3
CH 4
AUDIO IN
AUDIO OUT
VIDEO OUT
VGA
S-VIDEO
SPOT OUT
RS-232C
TX
RX
ALARM IN
ALARM OUT
ALARM RESET
NETWORK
AC IN
RJ45 Ethernet Cable
(Direct Cable)
INTERNET
Phone(ADSL) Line
ADSL MODEM
Hub/Switcher
Windows
Smart Viewer

[SHR-2041/2042]

3 Connecting the USB

1. There are two USB connecting ports on the front and back of SHR-2040/2041/2042.
2. USB Hard Disk, USB CD/DVD, and USB Memory are connected through the front and back ports of SHR-2040/2041/2042.
3. Only one USB device can be connected with each USB connecting port.
4. If the USB HDD is connected to the system, it should be detected and set through Menu - System - HDD setup before the operation.
5. It supplies the function of HOT PLUG, which connects/removes the USB device, during the system operation.

Note

See 5-8 System (HDD Setup) of User's Manual.

⚠ **Caution**

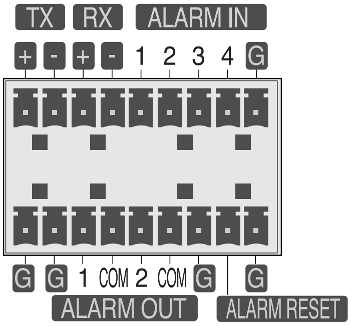
- *USB port on the front and back of SHR-2040/2041/2042 cannot be connected to same kinds of USB device. (For example, the case is that 2 CD-RW devices or 2 USB Memories are used by connection with the front and back of system.)*
- *If you use the USB Memory on SHR-2040/2041/2042, it should be composed of the format being supported by SHR-2040/2041/2042. Although you format it with FAT32 format on PC, it will be re-formatted, in case of (when) connecting with SHR-2040/2041/2042.*

⚠ **Caution**

- *The hard disk of USB device should be set to Master.*

4 Connecting the Alarm Input/Output

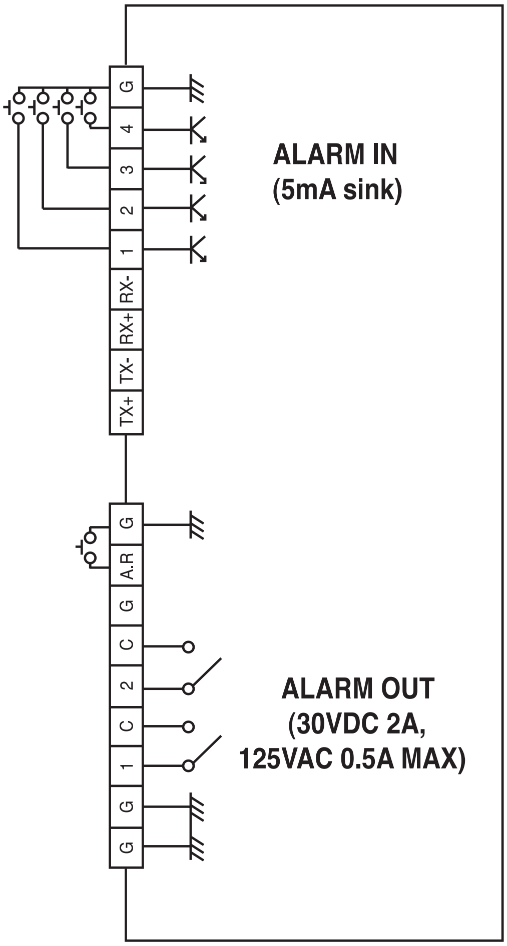
The Alarm IN/OUT port in the back of SHR-2040/2041/2042 is composed of the following elements.


TX
RX
ALARM IN
+
-
+
-
1
2
3
4
G
G
G
1
COM
2
COM
G
G
ALARM OUT
ALARM RESET

- ALARM IN/OUT Connection

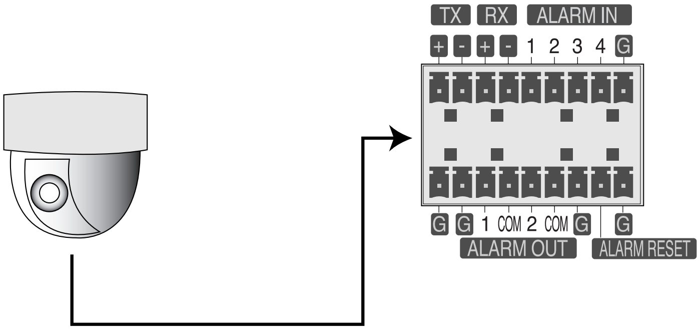
	Name	Function
1	- ALARM IN1 - ALARM IN2 - ALARM IN3 - ALARM IN4	ALARM Input Port
2	- ALARM RESET IN	On receiving an ALARM RESET signal, the system cancels the current ALARM input and output signal and then resumes sensing.
3	- ALARM OUT1 - ALARM OUT2	ALARM Output Port

- ALARM IN/OUT Connection

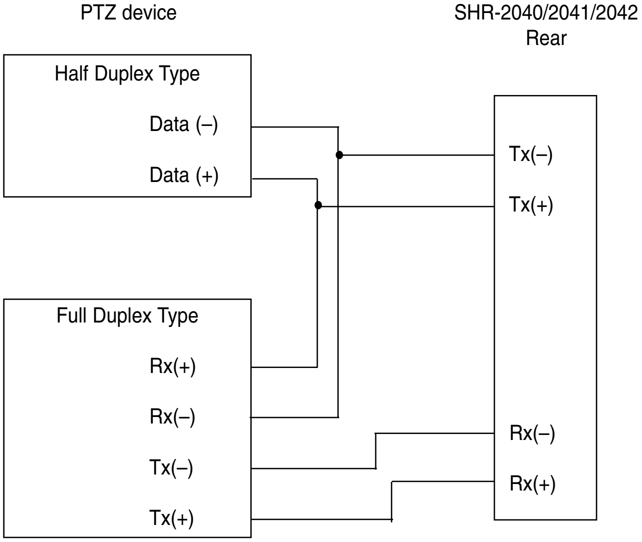

G
4
3
2
1
RX-
RX+
TX-
TX+
ALARM IN
(5mA sink)
G
A.R
G
C
2
C
1
G
G
ALARM OUT
(30VDC 2A,
125VAC 0.5A MAX)

5 Connecting the RS-485 Device

- Connect the RS-485 Device through the back port of SHR- SHR-2040/2041/2042.
- You can install and control the PTZ camera supporting the RS-485 communication.


TX
RX
ALARM IN
+
-
+
-
1
2
3
4
G
G
G
1
COM
2
COM
G
G
ALARM OUT
ALARM RESET

- You can adopt either Half Duplex or Full Duplex method for the connection.


PTZ device
SHR-2040/2041/2042
Rear
Half Duplex Type
Data (–)
Data (+)
Full Duplex Type
Rx(+)
Rx(–)
Tx(–)
Tx(+)
Tx(–)
Tx(+)
Rx(–)
Rx(+)

- Baud Rate supports 600 / 1200 / 2400 / 4800 / 9600 / 19200 / 38400.

⚠ Caution

Check if RS-485 device is compatible with SHR-2040/2041/2042 first.
Then pay attention not to change the polarity(+, -) of RS-485 when connecting it.

Chapter 4
Live

1

System Operation

- Turn the power on and the following LOGO pops up on the screen.

SAMSUNG DIGITall
everyone's invited.

- After the LOGO appears, all of LED in the front flickers 6 times to initialize the system for operation.
- Upon completion of normal initialization, the Live screen appears accompanying a beep sound.
- It requires 30 to 40 seconds until the Live screen appears.

Note

If a new HDD is installed, it may require more time to be appeared the Live screen due to the initialization time of a new HDD.

If the Live screen does not appear continuously or the LED in front repeats flickering, please check the connection between inside and outside. If the system does not operate in normal, contact with the shop where you bought the product.

- The Live screen does not affect the earlier MENU setup. If you reboot the system after power-off during recording, the Live screen will appear, accompanying recording.

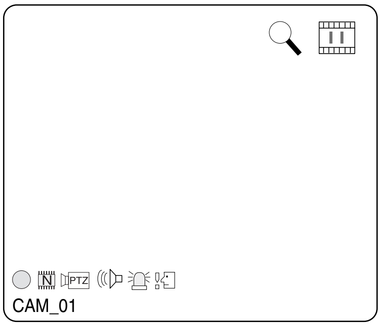
Note

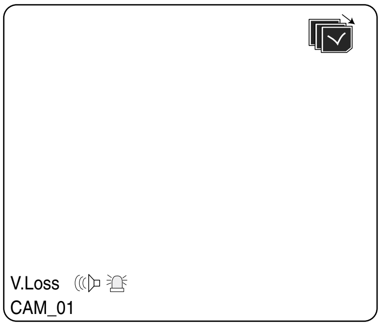
If the Live screen dose not appear, check if the Video Out comes out in Composite mode or VGA mode.

2 Live Screen Mode

Definition of Live Screen Icon

The Live screen icons display the current setup and function status of each screen.





○/Ⓔ/Ⓢ : Recording Icon
Each icon represents Normal / Event (Alarm + Motion) / Schedule Recording.

L / N / C : Recording Video Size Icon
Each icon represents the recording size of Large / Normal / CIF.
- Large : Full D1 - (NTSC) 720X480 (PAL) 720X576
- Normal : Half D1 - (NTSC) 720X240 (PAL) 720X288
- CIF : CIF - (NTSC) 352X240 (PAL) 352X288
  (Full D1 is supported only when “1 CH DVR support”)

🔒 : Recording lock icon
It indicates record lock while in record setup.
This icon appears while recording with the recording lock set.
You have to enter a password to cancel the recording.

PTZ/PTZ : PTZ Icon
This icon appears when setting the PTZ device with the PTZ icon and changes to yellow color when operating the PTZ.

🔊/🔊 : Audio Icon
This icon represents the Audio On/Off status and changes to yellow color at the Audio On. It does not appear in the Video mode or Audio Disable.

🚨 : Sensor In Event Icon
This icon appears in the channel linked with the external sensor signal when inputting the signal at the Sensor On.

🏃 : Motion Event Icon
This icon appears in the Motion Event channel at the Motion Detection On.

🔍 : Zoom Icon
This icon appears at the Zoom On or Zoom In and disappears when canceling the Zoom On.

II : Freeze Icon
This icon appears in the Freeze mode and disappears when canceling the Freeze.

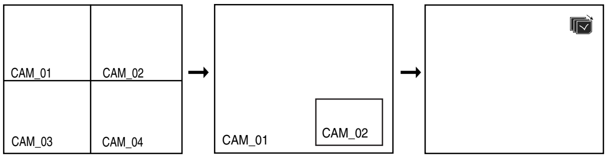
FULL : HDD Recording Disk Full Icon
This icon appears when the recording space is full in the HDD.

: Auto sequence Icon
This icon appears in the auto sequence mode.
: Backup Playback Icon
This icon appears when the backup data is played.
: Fan Error Icon
This icon appears when the fan stops.
: No HDD icon
This icon appears when there is a dysfunctional hard disk.

V.Loss / V.Off : Video Input Status
If there is no more video data input in the Video On, [V.Loss] appears in the channel.
If you set Video On/Off to Off, [V.Off] will appear.

Definition of Live Screen Mode

The system receives 3 live images and displays them in the following 3 modes.

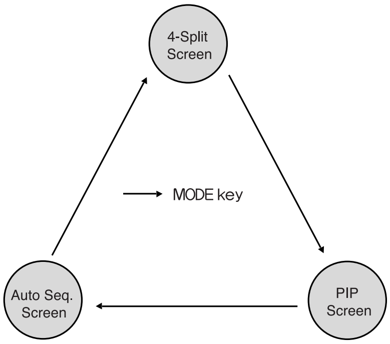


4 Split Mode PIP Mode Auto sequence Mode

- 4 Split Mode:
  Four channels are split in the screen separately.
  You are able to choose a channel as you want to in each split mode.
- PIP(Picture In Picture) Mode:
  Displays a one-fourth sized screen in the full screen. You are able to choose a channel as you want to, which is displayed in the full screen and reduced screen area. You may move the PIP screen at 5 stages in the Full screen with the ▲,▼ key.
- Auto sequence Mode:
  Displays the full screen of each channel in sequence according to the setup time.

Selecting Live Screen Mode

Each mode may be selected by [MODE Button] and [CH1 ~ CH4 Button].
The following figure shows Live Mode after converted.



- The default setup is 4 Split Screen Mode.
- You are able to choose other modes than Full Screen Mode by the [MODE] button in sequence. Whenever you press the [MODE] button, the system will change [4Split] ➝ [PIP] ➝ [auto sequence] ➝ [4 Split] in sequence.
- If you press [CH1~CH4 button], you will be able to see the full screen of each channel.
- The MODE button is used to return to the previous split mode screen from a full screen mode.

3 Live Channel Selection and Audio On/Off Setup

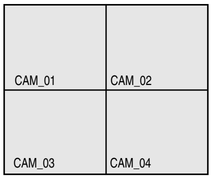
In other split modes than Full Screen Mode and Auto Sequence Mode, you can choose a channel to be displayed in each split area on your own. In addition, the channel being set to Audio On can be set to Audio On/Off in all Live Modes.

Audio On/Off Setup in the Full Screen

In full screen mode, the selected channel's Audio automatically turns on, and you can set the audio on and off as you toggle the audio button. Depending on the Audio On/Off setup condition, the Audio icon of the channel changes to the Yellow/white color.

Audio On/Off Setup in the 4 Split Mode

If you press [ENTER] Button in the 4 Split Mode, the selection cursor in the following figure will appear and the channel concerned will be selected. If you press the Audio button in the status of being selected a channel, you can set Audio On/Off for the channel concerned. Depending on the Audio On/Off setup condition, the Audio icon of the channel changes to the Yellow/white color.



Channel Selection and Audio On/Off Setup in the PIP Mode

As in the 4 Split Mode, if you press [ENTER] button in the PIP Mode, the selection cursor appears and the concerned channel is selected. With being selected a channel, you can select a channel on the current screen by the [CH1 ~ CH4] button and set Audio On/Off by the Audio button as in the 4 Split Mode. Depending on the Audio On/Off setup condition, the Audio icon of the channel changes to the Yellow/white color.

Note

Audio On/Off of 4 split mode cannot be set in the playback screen.

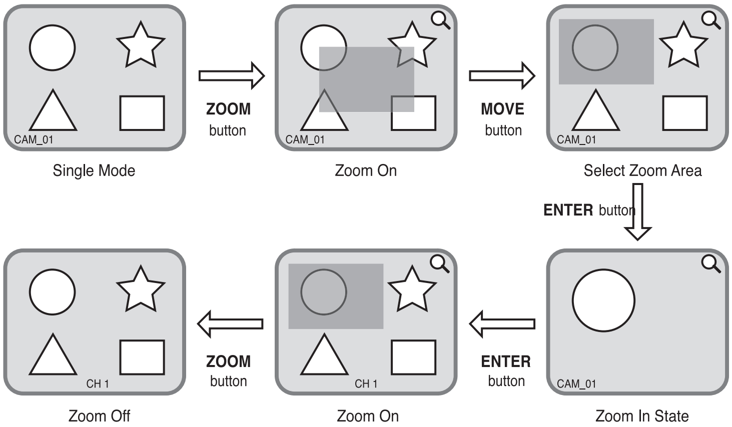
4 Freeze and Zoom

Freeze Function

Freeze function pauses the video image in the Live Screen, it is only available in the Live Mode. You can set freeze to on or off with the [FREEZE] button.

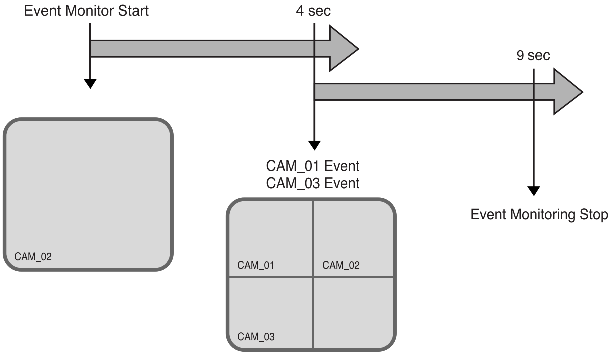
Zoom Function

Zoom function enlarges the selected area to double size, and it is only available in the single mode.
If the [ZOOM] button is pressed in the single mode, the Zoom area appears. Use the UP/DOWN/LEFT/RIGHT key to adjust the position of Zoom area. After selecting the Zoom area, press the [Enter] button to display the selection area in double size. You can adjust the video image position with the UP/DOWN/LEFT/RIGHT key at the Zoom in state. For Zoom off at the Zoom in state, use the [ZOOM] button.
[ZOOM LED] is turned on or off depending on the Zoom On/Off setup condition.


CAM_01
Single Mode
ZOOM
button
CAM_01
Zoom On
MOVE
button
CAM_01
Select Zoom Area
ENTER button
CAM_01
Zoom In State
ENTER
button
CH 1
Zoom On
ZOOM
button
CH 1
Zoom Off

5 Event Monitoring

Event monitoring displays the channel synchronized with a event on the screen when a special event (Sensor/Motion/Video Loss) occurs. Event monitoring On/Off and event duration setup is available in [Menu] → [Monitoring] mode.
If you set the event monitoring interval to 5 seconds and an event occurs at CH2 in the beginning as following figure, the system will display CH2 in the full screen for 5 second.
If another event occurs within 5 seconds, it is displayed together with the existing event. As the following figure, both CH1 and CH3 events occur within 5 seconds (for example, after 4 seconds) after occurring CH2 event, these three events are split into 4 screens.
If the new event does not occurs during the event duration, the system will return to the previous Live mode. Pressing the [ALARM] button during the event duration makes the event monitoring stop. On occurring an event, [ALARM LED] is turned on. Press the [ALARM] button to turn [ALARM LED] off.
The alarm setup is initialized and the event icon disappears, and the event monitoring is off if it is on when pressing the [ALARM] button. After the alarm goes off, if the event recording, pre-event time, and post-event time have been set, then the event recording will go on for the duration of the setup time.



Note

The Alarm LED does not turn off even though the event recording is finished. To turn the Alarm LED off, press the [ALARM] button.

6

Spot-out Monitoring

Spot-out Monitoring has nothing to do with Live Screen Output, it monitors the full screen of a certain channel. If you select the Monitoring in the MENU, the one channel among CH1 ~ CH4 is output with a Spot-out or channels are output one by one at an interval as Auto Sequence Mode in the Live Mode. Live screen icon does not appear in the spot-out monitoring.
The interval is as same as the Auto Sequence time in the Live Mode. If the Spot-out Event Monitoring is On, it is possible to see the event channel with Spot-out. In case of simultaneous event occurrence at more than one channel, the lowest numbered event channel has the first priority to be spotted out.

⚠ *Caution*

If the built-in HDD is not connected, or it operates with power applying in error,(▣) indicating "built-in HDD error" is displayed at the top of left.
At this time,

(1) Live screen mode
(2) Monitoring mode by Smart Viewer

operate only and the other functions including recording, search, playback, menu setup, and PTZ do not operate.
If the above problem is occurred, be sure to contact a service center to settle the problem.

⚠ *Caution*

If the fan in a set does not operate or has a problem, a fan error message pops up in the live screen as below picture. And the fan error icon ▣ appears at the top of left . If it is, check the fan in the set. The icon at the top of left disappears automatically if the fan recovers its operation.

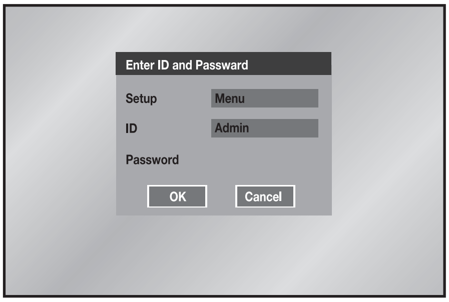
Fan Information

⚠ ***A error occurs in the fan.***
Refer to the manual.

Chapter 5
Menu Setup

Before Use

- User validation for entering the MENU window
  Press the "MENU" key to enter the Menu Setup window. Select Menu out of Menu, Backup, and Shutdown in the Setup field. (You can also perform the Backup and Shutdown functions after this user validation checkup.) The ID is fixed to Admin because only the user with Admin privilege can enter the Menu window. Input the Admin password you have defined and select OK.



Enter ID and Passward

Setup: Menu

ID: Admin

Password:

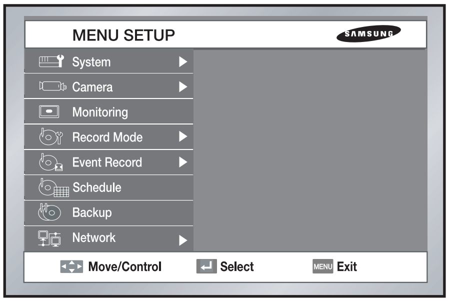
- Selection
  The yellow cursor shows the current window. Use the ▲,▼,◄, ► key in the front to move the cursor on your desirous menu. If you press the "Enter" key with the cursor clicking on your desirable menu, the system will enter the new mode.
  Press the "Enter" key to finish the selection. On seeing Drop Down Menu, use the ▲ or ▼ key to move the cursor on your desirable menu.

- "OK" or "Cancel" in Menu Setup Window
  Once changed, the new menu setup procedure will be finalized by pressing "OK".
  Pressing "Cancel" will cancel the new setup and return to the upper menu.

- Front "MENU" and "SEARCH" Button
  The MENU button or SEARCH button, if pressed first, acts as an entrance button.
  Once entering, it reverses the page to the previous one. When the MENU button is pressed in any of the Setup menus, it changes to the upper menu. If you press the MENU button in Live mode, the password window appears for user validation.

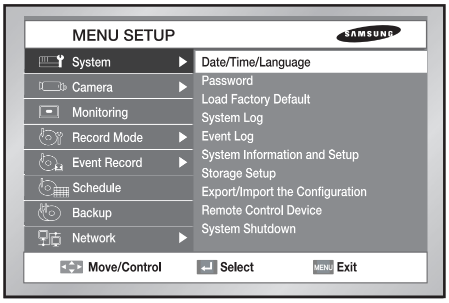
- The ">" or "V" mark beside the title copies the line in the arrow direction to the value of the first line.

- The first page of the menu is structured as follows.

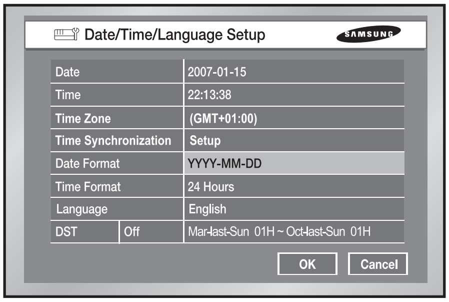


1 System

- System Menu has the following items in detail.


MENU SETUP
SAMSUNG
System
Camera
Monitoring
Record Mode
Event Record
Schedule
Backup
Network
Date/Time/Language
Password
Load Factory Default
System Log
Event Log
System Information and Setup
Storage Setup
Export/Import the Configuration
Remote Control Device
System Shutdown
Move/Control
Select
MENU Exit

Date/Time/Language Setup


Date/Time/Language Setup
SAMSUNG
OK
Cancel

Date		2007-01-15
Time		22:13:38
Time Zone		(GMT+01:00)
Time Synchronization		Setup
Date Format		YYYY-MM-DD
Time Format		24 Hours
Language		English
DST	Off	Mar-last-Sun 01H ~ Oct-last-Sun 01H

- Date
  Press the “Enter” key and the ◄, ► key to move to Y/M/D.
  Use the ▲, ▼ key to change the date.
  Press the “Enter” key to come out of the mode.

- Time
  Press the “Enter” key and the ◄, ► key to move to H/M/S.
  Use the ▲, ▼ key to change the time.
  Press the “Enter” key to come out of the mode.
  Once changed, the date and time will remain unchanged until you press “OK” or “Cancel”.

Note

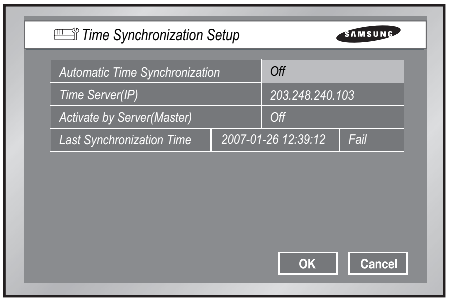
[Date/Time Change]
Pressing "OK" after you change date and time, you will be asked by a pop-up window if you really confirm the change. Here, press "Yes" to change the time. Since Date/Time does not change in backup process, be sure to stop the backup process before you change Date/Time. If the date or time is changed, the system reboots.

⚠ *Caution*

[Date/Time Change]
If the Date/Time changes to the original value, the data recorded before the change may be deleted. For example, if the time is changed from 8 am to 7 am, all the data recorded between 7 am and 8 am will be deleted.

- Time Zone
  Set the local time zone based on the Greenwich Mean Time (GMT).

- Time Synchronization
  The time of your DVR can be synchronized by a specified server. For this purpose, enter the IP address of the time server and determine the initiator of this activity.
  - Automatic Time Synchronization Synchronizes while gathering time information from the Time Server (IP)
  - Activate by Server(Master)Time Synchronization is executed while more than two DVR devices are connected, and the operating DVR device connected to the server is set as standard.



Automatic Time Synchronization	Off	
Time Server(IP)	203.248.240.103	
Activate by Server(Master)	Off	
Last Synchronization Time	2007-01-26 12:39:12	Fail

- Date Format
  The system supports 3 formats, YYYY-MM-DD / DD-MM-YYYY / MM-DD-YYYY.

- Time Format
  The system supports 2 formats, 24 Hour / 12 Hour(AM/PM).

- Language
  After selecting a language, OSD is expressed in the selected language.
  The available language is added in the list.

- DST (Daylight Saving Time)
  DST sets the clock one hour ahead the local standard time. This setting enables the system to display the time adjusted for DST. If the DST is set to Off, it does not apply. To set the DST, enter the start time and end time on the right. It allows you to set month, week (e.g. 1st, 2nd, 3rd, 4th, last), day, and time.

Note

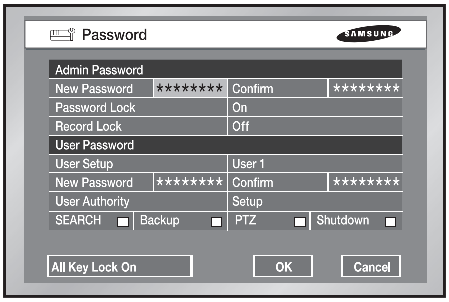
[On DST Setup]
Backup in progress will be cancelled. Recording in progress will be suspended for a moment until rebooting.

Caution

[Ending DST]
As the system goes one hour earlier, the data recorded since an hour ago will be deleted. As DST activates at the preset time, you are recommended to take the utmost care of preventing any trouble incurred by data deletion or rebooting.

Password

The factory default password for Admin and user privileges is "4321." In case of user privilege, you can select any of 5 users (User1 to User5) and assign user access rights for the selected user. If you press Setup in User Authority, all the access rights are selected.



Admin Password			
New Password	********	Confirm	********
Password Lock		On	
Record Lock		Off	
User Password			
User Setup		User 1	
New Password	********	Confirm	********
User Authority		Setup	
SEARCH ☐	Backup ☐	PTZ ☐	Shutdown ☐

- The Default Password is 4321.
- New Password
  This is used to change the system password inside SHR-2160/2162/2080/2082. You are allowed to create a password up to 8 digits. Press the “Enter” key and a channel button from 1~9,10(operates as 0) at the left. Press the “Enter” key after change to move to “New Password Confirm”.
- New Password Confirm
  This confirms a new password. You shall be obliged to input New Password in the above row first. Without New Password input, New Password Confirm input has no effect.

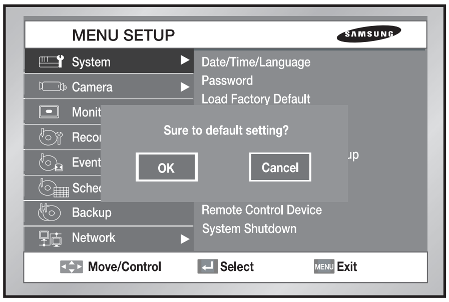
- Password Lock
  If it is set to On, a pop-up window for user validation (You have to fill in the Setup, ID, and Password fields.) appears every time you select a menu. If it is set to Off, you can enter menus without entering the password.
- Record Lock
  If the Record Lock is set to On, a pop-up window, asking for the password appears while disabling the recording.
- User Authority
  You can select any of Search, Backup, PTZ, and Shutdown. As an example, if the user has no access right for Search, the user cannot enter the Search menu.
- All Key Lock On
  If you select this, the system will enter the live mode immediately. If you press any button on the front panel or remote control, the password input window appears. If the correct password is input, the lock function is deactivated.

Note

[All Key Lock On]

If you select this, the system immediately switches to the live mode and all buttons are locked.

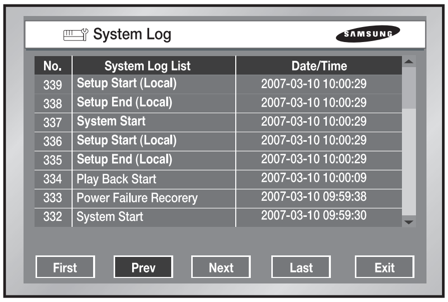
Load Factory Default


MENU SETUP
SAMSUNG
System
Camera
Monit
Recor
Event
Sche
Backup
Network
Date/Time/Language
Password
Load Factory Default
up
Remote Control Device
System Shutdown
OK
Cancel
Move/Control
Select
MENU Exit

Sure to default setting?

- It used to initialize all the menu setup values. The recorded data will not be deleted.
  Press "OK" in the confirmation window to start initializing.

System Log



No.	System Log List	Date/Time
339	Setup Start (Local)	2007-03-10 10:00:29
338	Setup End (Local)	2007-03-10 10:00:29
337	System Start	2007-03-10 10:00:29
336	Setup Start (Local)	2007-03-10 10:00:29
335	Setup End (Local)	2007-03-10 10:00:29
334	Play Back Start	2007-03-10 10:00:09
333	Power Failure Recorery	2007-03-10 09:59:38
332	System Start	2007-03-10 09:59:30

- System Log is used to check the important record by an administrator.
- It displays such contents of a system related log and its execution date/time as System Start, System Termination, and Menu Setup Change.
- First : Moves to the first Log page.
- Prev : Moves to the previous Log page.
- Next : Moves to the next Log page.
- Last : Moves to the recent Log page.

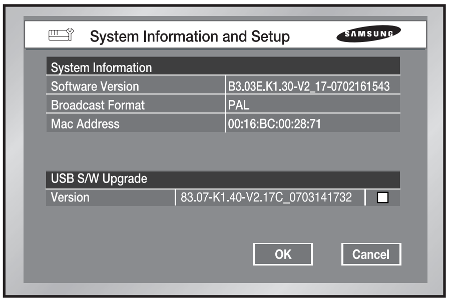
Event Log

- It used to check the record regarding Event like Alarm / Motion / Video Loss.
- It displays the contents of a log regarding event and its execution date / time.
- First : Returns to the first Log page.
- Prev : Back to the previous Log page.
- Next : Forwards to the next Log page.
- Last : Moves to the recent Log.

- Event Log List

Video Loss CH[N]	Means the occurrence of Channel [N] Video Loss.
Alarm Detection CH[N]	Means the occurrence of Channel [N] alarm.
Motion Detection CH[N]	Means the occurrence of Channel [N] Motion.

System Information and Setup



System Information and Setup

System Information	
Software Version	B3.03E.K1.30-V2_17-0702161543
Broadcast Format	PAL
Mac Address	00:16:BC:00:28:71

USB S/W Upgrade		
Version	83.07-K1.40-V2.17C_0703141732	☐

This setup window provides the following setting items:

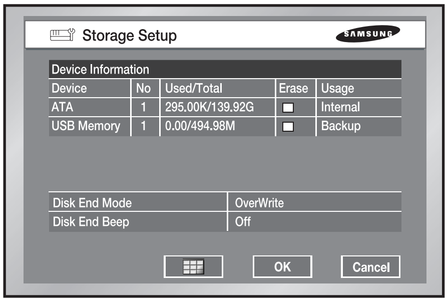
- Software Version: Displays the current software version. The value cannot be changed.
- Broadcast Format: Displays the current broadcast format (NTSC/PAL). The value cannot be changed.
- Mac Address: 6-Byte hardware address. The value cannot be changed.
- USB S/W Upgrade
  You can update the software using an USB device. If there is no device, None is displayed. If the USB memory has an upgrade software, its version is displayed. To upgrade the software stored in the USB device, select the check box on the right and press OK.

⚠ Caution

[USB S/W Upgrade]
Download the software to upgrade at http://www.samsung.com, CCTV Part.
If the USB memory to upgrade has a format not being supported by DVR set, the upgrade is impossible.
In this case, use the "device erase" of menu 5-7 system information and setup.
Only one file to upgrade is allowed in the USB Memory.

Storage Setup

You can configure the storage device related settings.



Device Information				
Device	No	Used/Total	Erase	Usage
ATA	1	295.00K/139.92G	☐	Internal
USB Memory	1	0.00/494.98M	☐	Backup

Disk End Mode	OverWrite
Disk End Beep	Off

- Device Information
  Displays the number, capacity, and usage of ATA and USB devices. The displayed values are not changed. You can remove the data in HDD or USB memory after checking in the Erase box.

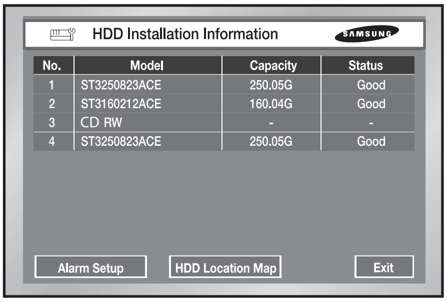
- Disk End Mode
  Stop: Stops recording when the disk is full while recording is still in progress.
  Overwrite: Deletes the previously recorded data to store new data when the disk is full during recording.

- Disk End Beep
  On: Beeps when the disk is full while recording.
  Off: Although the disk is full while recording, it doesn't make beep sound.

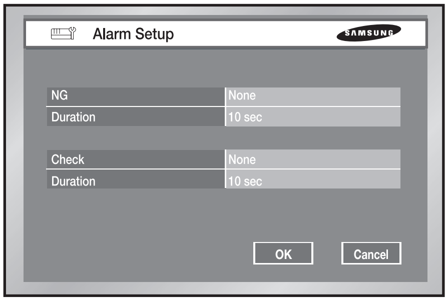
- HDD Installation Information
  When you click (▦), The HDD Installation Information displays on the screen. Then you can see the model name, the capacity, and the status of the HDD in your DVR. The status displays Good, Not good, and Check. In the status of Not good,you should replace the HDD. In the status of Check, you should replace the HDD or check periodically. After clicking the Alarm Setup, you can set the alarm and the duration while the status is Not good or Check. If you click the HDD location map, it displays the information about the HDD installation. When a problem occurs, you can see which HDD has a problem.

Note 1

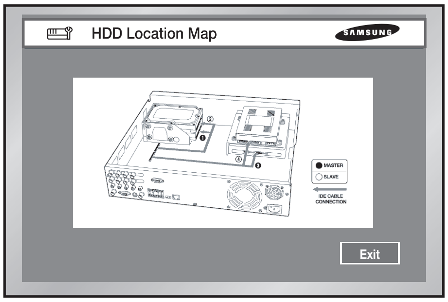
- ***The capacity of the HDD may differently appear in the Storage Setup menu and HDD Installation Information menu.***
- ***The OSD is different depending on the model.***


HDD Installation Information
SAMSUNG
Alarm Setup
HDD Location Map
Exit

No.	Model	Capacity	Status
1	ST3250823ACE	250.05G	Good
2	ST3160212ACE	160.04G	Good
3	CD RW	-	-
4	ST3250823ACE	250.05G	Good


Alarm Setup
SAMSUNG
OK
Cancel

NG	None
Duration	10 sec
Check	None
Duration	10 sec


HDD Location Map
SAMSUNG
MASTER
SLAVE
IDE CABLE CONNECTION
Exit

Note 1

[Internal HDD]
This is a physical hard disk connected with the IDE cable inside the SHR-2160/2162/2080/2082 main body, and stores data.
[External HDD]
This is a physical hard disk connected with the port and terminal in the back of the SHR-2160/2162/2080/2082 main body, and stores data.
This can be used as Extended HDD or Backup HDD.
- Extended HDD : Supplements Internal HDD quantity. Connected, it takes the place of Internal HDD.
- Backup HDD : Backs up the data recorded in the set.
[HDD Location Map]
Depending on the model (SHR-2040/2041/2042), HDD Location Map appears differently on the screen.

Note 2

[ATA]
Usage : Internal HDD
This is a physical hard disk connected with the IDE cable inside the SHR-2160/2162/2080/2082 main body.
[USB]
Usage : External HDD(Extended HDD or Backup HDD)
It is physical hardware that is connected to the front/back part of the SHR-2160/2162/2080/2082 with the USB port.

⚠ *Caution*

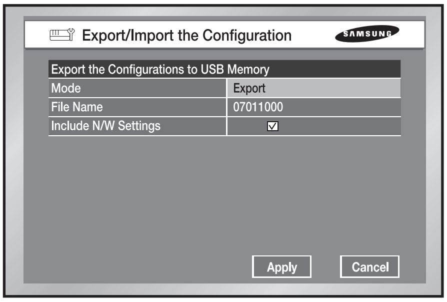
[Device Erase]
Data will not be deleted in the backup mode.
Please be sure to stop the backup before you delete a data. In the recording mode, suspend the recording and delete a data.

⚠ *Caution*

When the Disk end mode is set to Overwrite and the HDD overwrites the data that was previously backed up, the backup start time may be changed or the backup process may be cancelled.
[Disk Overwrite]
When Overwrite is selected, the previous event data is to be deleted and the mode is also changed.

Export/Import the Configuration

This menu is used to export or import the DVR-related settings to/from the USB memory.



Export the Configurations to USB Memory

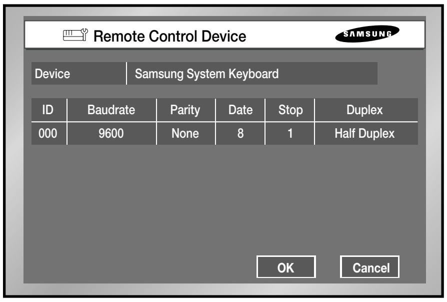
Mode	Export
File Name	07011000
Include N/W Settings	☑

The related settings are as the following:

- Mode: You can select any of Import and Export.
- File Name or File Open: The file naming is YYMMDD00 by default. "00" is the serial number so it increases by 1. If you want to change the file naming, press the ENTER button. The virtual keyboard appears for you to change the input value. In case of Import, the name of the import file that is included in the inserted USB appears. When the importing completes, your DVR automatically reboots.
- Include S/W Settings: In case of Export, it remains checked. But with Import, you can change the selection. Import/Export function does not affect for the Motion Detection Setup Area and Record Schedule.

Remote control Device

- MENU for the use of Samsung system keyboard



Remote Control Device

Device: Samsung System Keyboard

ID	Baudrate	Parity	Date	Stop	Duplex
000	9600	None	8	1	Half Duplex

- Device
  A Remote Control Device, being connected to the RS485 port.
- ID
  This is a private ID of SHR-2040/2041/2042.
  This private ID is essential for SSC-2000 because SSC-2000 can control many SHR-2040/2041/2042 DVRs.

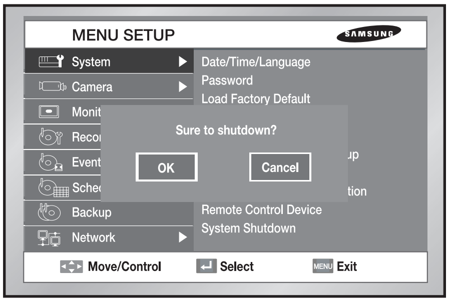
- Device
  A Remote Control Device, being connected to the RS485 port.
- ID
  This is a private ID of SHR-2040/2041/2042.
  This private ID is essential for SSC-2000 because SSC-2000 can control many SHR-2040/2041/2042 DVRs.

- Baudrate
  Baudrate to communicate with SSC-2000
  It should be same to SSC-2000 Baudrate for communication.
- Parity
  Sets up one of None / Even / Odd.
- Data
  Sets up either 7 or 8.
- Stop
  Sets up either 1 or 2.
- Duplex
  Sets up either Half Duplex or Full Duplex.

Note

You cannot use the PTZ device device and remote control device at the same time, because of communication problems.
In PTZ control mode, DVR's PTZ mode is canceled when remote control mode is connected, and the remote control device is disconnected when the DVR changes to PTZ mode while controlling the DVR with a remote control device.
Refer to the remote control device manual on how to control the DVR's PTZ device in the remote control device.

System Shutdown


MENU SETUP
SAMSUNG
System
Camera
Monit
Recor
Event
Sched
Backup
Network
Date/Time/Language
Password
Load Factory Default
up
tion
Remote Control Device
System Shutdown
Sure to shutdown?
OK
Cancel
Move/Control
Select
MENU Exit

- Terminates the work in action safely and turns the power off. Press "OK" in the confirmation window and plug out when you see "Safe to Power Off".

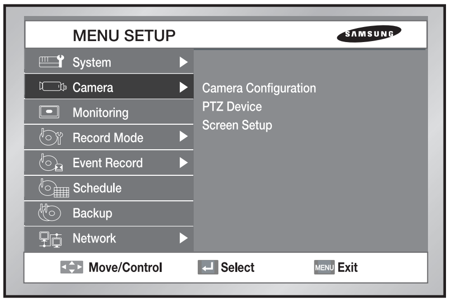
Caution

[System Shutdown]
Power-off without terminating the system in the System Shutdown menu may incur improper motion like data loss and disk failure. Power-off shall be done in the System Shutdown menu.

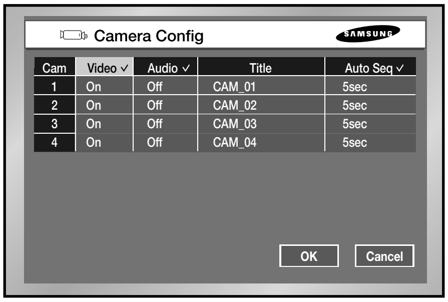
2

Camera

- The detailed Camera Menu items are as follows.


MENU SETUP
SAMSUNG
System
Camera
Monitoring
Record Mode
Event Record
Schedule
Backup
Network
Camera Configuration
PTZ Device
Screen Setup
Move/Control
Select
MENU Exit

Camera Config.

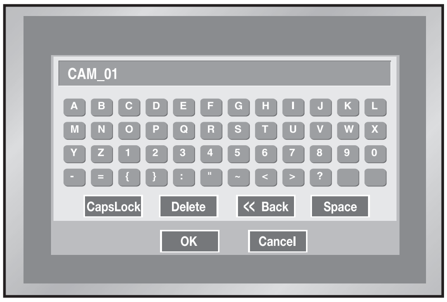

Camera Config
SAMSUNG
OK
Cancel

Cam	Video ✓	Audio ✓	Title	Auto Seq ✓
1	On	Off	CAM_01	5sec
2	On	Off	CAM_02	5sec
3	On	Off	CAM_03	5sec
4	On	Off	CAM_04	5sec

- Video
  On : Camera images from a selected channel appear.
  Off : Camera images from a selected channel disappear.
  Covert1 : Displays the information except for the Video information of selected channel.
  Covert2 : Does not display the any information.
  Audio/Cam name/Auto sequence setup are impossible in the Off channel.

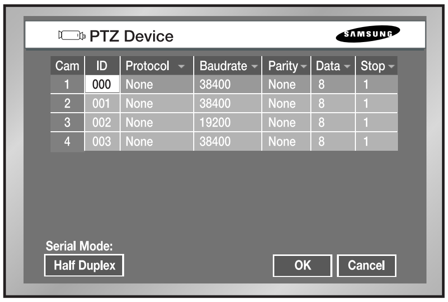
- Audio
  On : Makes the sound of selected channel on.
  Off : Makes the sound of selected channel off.

- Title
  You can name the camera of selected channel.
  If you press the [Enter] key, the Virtual keyboard will come out.
  ► Virtual Keyboard
  If you move the cursor, you can type text by text.
  Up to 15 texts can be typed.
  Keyboard cannot be composed of all spaces.
  Pressing Caps Lock changes the keyboard that can be selected. (2 Modes)


CAM_01
A B C D E F G H I J K L
M N O P Q R S T U V W X
Y Z 1 2 3 4 5 6 7 8 9 0
- = { } : " ~ < > ?
CapsLock
Delete
« Back
Space
OK
Cancel

- Auto Sequence
  You are allowed to set the duration of each channel at the Auto Sequence channel in the Live Mode.
  A channel, set to Off, does not operate in the Auto Sequence Mode.

PTZ Device



Cam	ID	Protocol	Baudrate	Parity	Data	Stop
1	000	None	38400	None	8	1
2	001	None	38400	None	8	1
3	002	None	19200	None	8	1
4	003	None	38400	None	8	1

Serial Mode: Half Duplex

- ID
  It is an ID for PTZ Camera and available to set from 0 to 255.

- Protocol
  It is supported by the PTZ device.
  The following protocols are now being supported.
  Samsung / Vic. / Pan. / AD / Phi. / Ern. / Pel-D / Pel-P / Vcl. / Dia. / Kal. /Tech.

- Baurate
  Baurate is supported by the PTZ device. 600 / 1200 / 2400 / 4800 / 9600 / 19200 / 38400

- Parity
  It is set to the one of None, Even, and Odd.

- Data
  It is set to either 7 or 8.

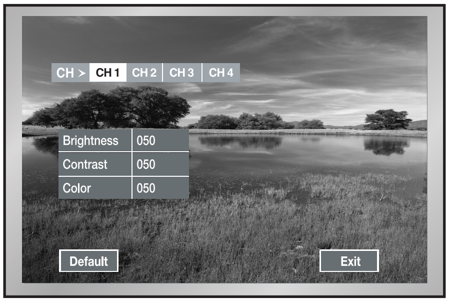
- Stop
  It is set to either 1 or 2.

- Duplex
  It is set to either Half Duplex or Full Duplex.

Caution

The above items shall be same to the PTZ device setup.
For the details, please refer to User Manual of the PTZ device manufacturer.

Screen Setup



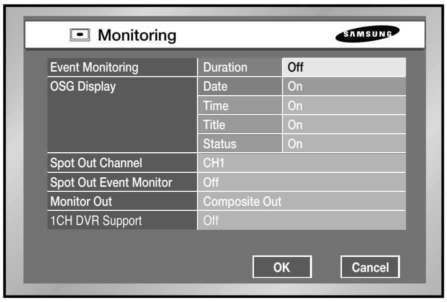
Brightness 050
Contrast 050
Color 050

- It is a window to set Brightness/Contrast/Color for the camera image of each channel. Put the cursor on the channel that you want to adjust and set Brightness/Contrast/Color. Once selected, the channel appears in the right PIP area. Use the ▲ or ▼ button to adjust the value from 0 to 100.

- If you select CH >, all the channels will have the same values as the selected channel.

- "Default value" resets the current channel to the basic value of 50.

3 Monitoring



Event Monitoring	Duration	Off
OSG Display	Date	On
	Time	On
	Title	On
	Status	On
Spot Out Channel	CH1	
Spot Out Event Monitor	Off	
Monitor Out	Composite Out	
1CH DVR Support	Off	

- Event Monitoring

  It is possible to set to Off / 3sec / 5sec / 10sec / 20sec / 30sec / Continuous.

  ① Off : Event Monitoring does not operate to turn to the screen where an event occurs.

  ② 3sec / 5sec / 10sec / 20sec / 30sec : Sets the duration time of screen in the Auto Sequence mode.

  ③ Continuous : The Event Monitoring screen remains alive until you press the “Alarm” button in the front to cancel the screen manually.

- OSG Display

  ① Date : The date is displayed on the screen when it is On, and not displayed when it is Off.

  ② Time : The time is displayed on the screen when it is On, and not displayed when it is Off.

  ③ Cam name : The Cam name is displayed on the screen when it is on, and not displayed when it is off.

  ④ Status : Audio/Ptz is displayed on the screen when it is on, and not displayed when it is off.

- Spot Out Channel

  Spot Out channel is used to let one of two monitors monitor a channel, focusing on it. Spot Out channel supplies two functions, continuous monitoring of only one channel and Auto Sequence to display all the channels one by one.

  ① Auto Sequence setup ranges from Ch1 to Ch 4.

  ② In the Auto Sequence mode, Spot Out channels are displayed in turn.

  ③ Duration time for Auto Sequence is as same as set for Camera setup.

- Spot Out Event Monitor

  Sets if event monitoring will be executed for Spot Out channels.

  ① Off : The event monitoring dose not operate in the Spot Out channel.

  ② 3sec / 5sec / 10sec / 20sec / 30sec : Sets the duration time of screen in the Auto Sequence mode.

  ③ Continuous : Once scrolled down, the screen remains displayed until you delete “Alarm” LED in the front manually.

- Monitor

  You are not allowed to connect VGA OUT and Composite / S-Video OUT simultaneously. Consequently, the user is obliged to choose either Composite Output or S-Video Output.

  ① Composite : Makes the output come out through the "Composite / S-Video OUT" port.

  ② VGA : Makes the output come out through the "VGA Out" port.
  When changing the output from Composite to VGA or from VGA to Composite, the system reboots automatically.

- Multi-channel change

  You can set changes for a split screen.
  You can set it to 3, 5, 10, 20, or 30 seconds.

- 1 CH Support

  1 CH DVR is supported. If 1 CH Support is On, 1 CH is supported.
  If 1 CH Support is Off, 4 CH is supported.
  If 1 CH Support is On, a set reboots and support 1 CH.

⚠ Caution

[Video Out]
When setting the Composite Output, VGA output does not come out.
When setting the VGA Output, Composite Output does not come out.
If you press the No. 1 button for 5 seconds in the Live Mode with keeping the MODE button pressed, the system will change from VGA to COMPOSITE or from COMPOSITE to VGA and reboot.

[1 CH support]
In the case of 1 CH support, the event monitoring, Spot out channel, Spot out event monitoring cannot be set.
Full D1/Half D1/CIF is supported for the video size in the 1 CH.
If the Full D1 is set and 1 CH support Off is selected, the video size in the 4 CH set to CIF.
In the 1 CH setup, the system value is initialized.

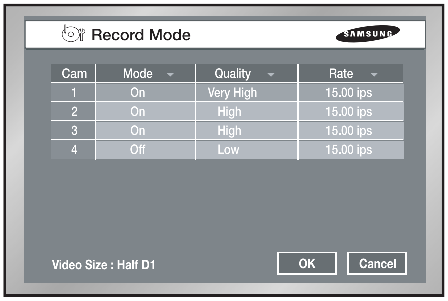
[Video Output]
VGA output : 640 X 480 (60Hz)

4 Recording Mode

Record Mode

- Details for Record Mode Menu are as follows.

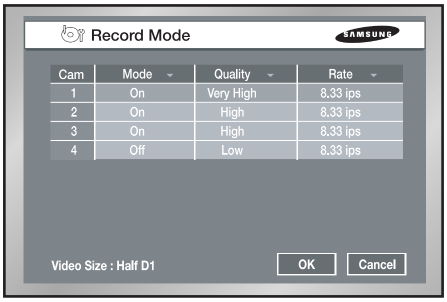
NTSC



Cam	Mode	Quality	Rate
1	On	Very High	15.00 ips
2	On	High	15.00 ips
3	On	High	15.00 ips
4	Off	Low	15.00 ips

Video Size : Half D1

PAL



Cam	Mode	Quality	Rate
1	On	Very High	8.33 ips
2	On	High	8.33 ips
3	On	High	8.33 ips
4	Off	Low	8.33 ips

Video Size : Half D1

If you press the front “REC” button, the mode value to be recorded will be set.

☛ For the setup of Event Recording Mode value, refer to 5-20. Event Recording Mode Setup Menu.

- Mode
  On : The current channel is recorded if the REC button is pressed.
  Off : The current channel is not recorded even thought the REC button is pressed. The default value is set to “On”.

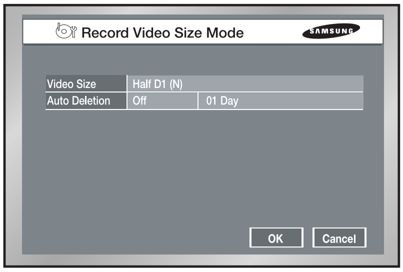
- Quality
  It sets the Quality.
  Set to the one among Very High / High / Standard / Low

- Rate
  It sets the Rate means the number of screen recorded every second.
  If it is set to 15.00 ips(NTSC) / 12.50 ips(PAL), the system records too many screens per second and the playback continues intermittently since recording is more detailed.
  This is appropriate for concentrated monitoring zone setup.
  IIn case of NTSC, select one out of 30.00 ips / 15.00 ips / 10.00 ips / 7.50 ips / 5.00 ips / 3.00 ips / 1.00 ips. In case of PAL, select one out of 25.00 ips / 12.50 ips / 8.33 ips / 6.25 ips / 5.00 ips / 2.50 ips / 1.00 ips. The Recording Menu will be activated depending on Video On/Off in the Camera Setup (Menu5-12). When less than 2 cameras are activated at HALF D1, the frame rate of recording may start from 30.00 IPS and when more than 3.00 cameras are activated at Half D1, the frame rate of recording may start from 15.00 ips(NTSC) / 12.50 ips(PAL). CIF supports from 30.00 ips(NTSC) / 25.00 ips(PAL) regardless of the number of activated camera.

- Video size
  The Video size is displayed at the bottom of left.

- When changing to a 1-channel DVR, it only supports 30.00 ips in the Full D1 resolution.

Record Video size Mode



Video Size	Half D1 (N)	
Auto Deletion	Off	01 Day

- Video size

  It sets the video to be recorded.

  Half D1 : (NTSC) 720x240(N) → Normal
  (PAL) 720x288(N) → Normal
  CIF : (NTSC) 352x240(C) → CIF
  (PAL) 352x288(C) → CIF

- Auto Deletion

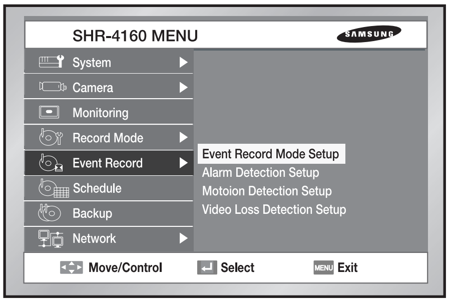
  If you click the [off] button, you can select from on/off.
  Select “On” to move to the Date selection button and to limit the search date.
  If you select “Off”, you cannot move to the Date selection button and to limit the search date.
  The date is limited from 1 to 99 days.

Note

To select Full D1, set 1 CH Support to On in the monitoring mode.

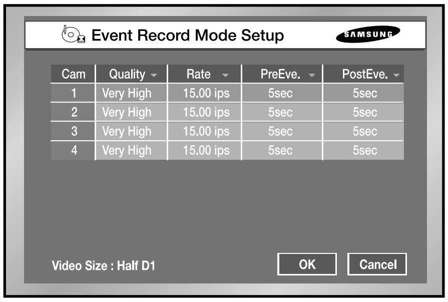
Event Record Mode

- The detailed items of Event Record Menu are as follows.


SHR-4160 MENU
SAMSUNG
System
Camera
Monitoring
Record Mode
Event Record
Schedule
Backup
Network
Event Record Mode Setup
Alarm Detection Setup
Motoion Detection Setup
Video Loss Detection Setup
Move/Control
Select
MENU Exit

Event Record Mode setup

NTSC

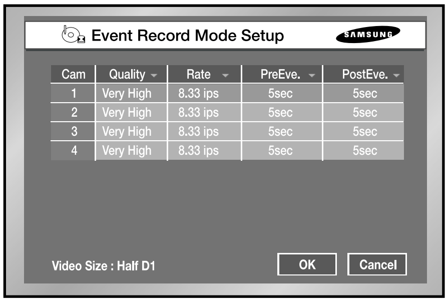

Event Record Mode Setup
SAMSUNG

Cam	Quality	Rate	PreEve.	PostEve.
1	Very High	15.00 ips	5sec	5sec
2	Very High	15.00 ips	5sec	5sec
3	Very High	15.00 ips	5sec	5sec
4	Very High	15.00 ips	5sec	5sec

Video Size : Half D1

OK
Cancel

PAL


Event Record Mode Setup
SAMSUNG

Cam	Quality	Rate	PreEve.	PostEve.
1	Very High	8.33 ips	5sec	5sec
2	Very High	8.33 ips	5sec	5sec
3	Very High	8.33 ips	5sec	5sec
4	Very High	8.33 ips	5sec	5sec

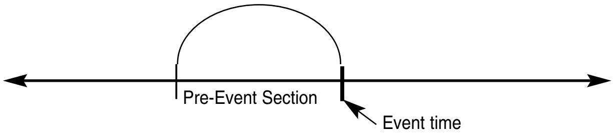
Video Size : Half D1

OK
Cancel

- Event Record Mode setup
  Sets a mode to be recorded when an event occurs.

- V. Size (Video Size)
  Sets the size of a screen to be recorded.
  Half D1 : (NTSC) 720x240(N) → Normal
  (PAL) 720x288(N) → Normal
  CIF : (NTSC) 352x240(C) → CIF
  (PAL) 352x288(C) → CIF

- Quality
  Quality will be determined.
  Select the one among Very High / High / Standard / Low
- Rate
  Sets the Rate the number of screen recorded every second.
  It you set to 15.00 ips, the system records too many screens per second and play continues intermittently since recording is more detailed. This is appropriate for concentrated monitoring zone setup.
  In case of NTSC, select the one of 30.00 ips / 15.00 ips / 10.00 ips / 7.50 ips / 5.00 ips / 3.00 ips / 1.00 ips.
  In case of PAL, select the one of 25.00 ips / 12.50 ips / 8.33 ips / 6.25 ips / 5.00 ips / 2.50 ips / 1.00 ips.
- The Event Recording setup menu will be activated depending on Video On / Off in Camera Setup (Menu5-12).
- When the video size in the Camera Setup Menu is set to Half D1 and less than 2 cameras are activated, the frame rate of recording may start from 30.00 ips(NTSC) / 25.00 ips(PAL) and when the video size in the recording mode is set to Half D1 and more than 3 cameras are activated, the frame rate of recording may start from 15.00 ips(NTSC) / 12.50 ips(PAL). CIF supports from 30.00 ips(NTSC) / 25.00 ips(PAL) regardless of the number of activated camera.
- Pre-Event(PreEve)

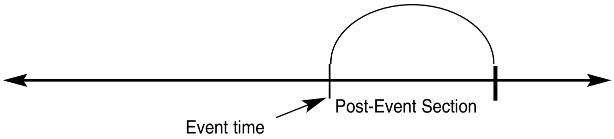


Records the situation until Alarm is issued.

Off : No recording

5sec / 10sec / 20sec / 30sec : The recording time options before Alarm issue

- Post-Event(PostEve)



Records the situation since Alarm is issued.

Off : No recording

5sec / 10sec / 20sec / 30sec / 1min / 3min / 5min / 10min / 20min : Sets the recording time after an event occurs.

- Video size
  The Video size is displayed at the bottom of left 5-19.
- When changing to a 1-channel DVR, it only supports 30 ips in the Full D1 resolution.

Alarm Detection Setup

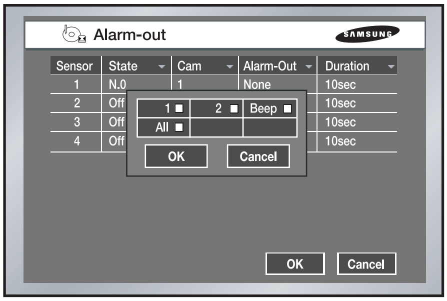
- Off : Sensor does not operate.
  ① N.O(Normal Open) Sensor : Sensor remains open all the time and if closed, an alarm will be issued. (A Contact)
  ② N.C(Normal Close) Sensor : Sensor remains closed all the time and if open, an alarm will be issued. (B Contact)

- Cam

  It is used to set a camera that synchronizes with the current sensor. The default setting follows the sensor number. A sensor can synchronize with multiple cameras so multiple values can be selected. You can set a preset for each camera to synchronize sensors with cameras. If a sensor triggers the corresponding camera, the camera can show you the preset location.

- Alarm-out

  Sets the Alarm-Out when Alarm Sensor sounds.
  5 Alarm Outs are supported un the present.
  Choose an alarm-out that you want to synchronize with the current sensor.
  Multi-selection is possible.



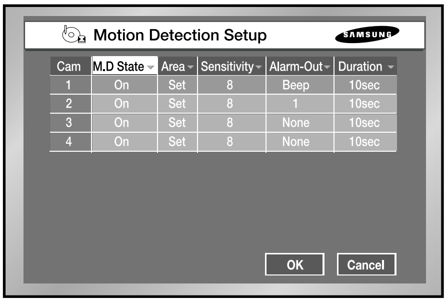
Alarm-out

Sensor	State	Cam	Alarm-Out	Duration
1	N.0	1	None	10sec
2	Off			10sec
3	Off			10sec
4	Off			10sec

- Duration

  Sets the Alarm-Out Duration. Alarm-Out continues for the set value.
  Off / 3sec / 5sec / 10sec / 20sec / 30sec / Continuous

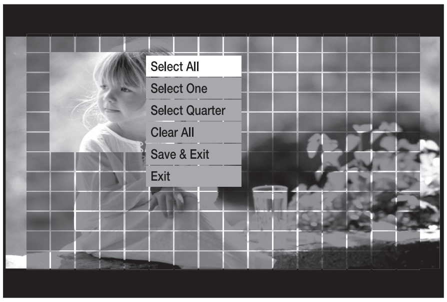
Motion Detection Setup


Motion Detection Setup
SAMSUNG
OK
Cancel

Cam	M.D State	Area	Sensitivity	Alarm-Out	Duration
1	On	Set	8	Beep	10sec
2	On	Set	8	1	10sec
3	On	Set	8	None	10sec
4	On	Set	8	None	10sec

- Motion Detection Mode
  Off : Motion Detection does not operate
  On : Motion Detection operates.

- Area
  Selects the Motion Detection area. It is composed of 45x40(NTSC)/45x48(PAL) sized Block. It is impossible to set 4 block rows(Up/Down/Left/Right) to allow them to be displayed in all monitors.
  ► Select All : Selects the whole area.
  ► Select Block : Selects a block every time. Selection is done by a toggle system.
  ► Select Quarter : Splits the whole area into 4 pieces, which enables selecting a fourth of the whole area.
  ► Clear All : Cancels the whole area.
  ► Save & Exit : Saves and exits.
  ► Exit : Exits without saving.


Select All
Select One
Select Quarter
Clear All
Save & Exit
Exit

- Sensitivity

  Sets the sensitivity of motion detection. Sensitivity: 1(L), 2, 3, 4, 5, 6, 7, 8, 9, 10(H).

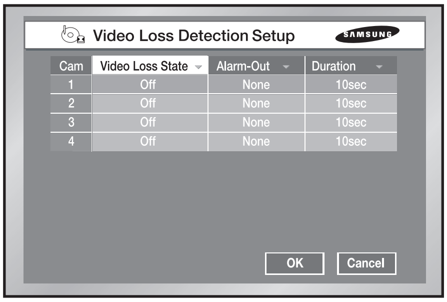
- Alarm-Out

  Sets the Alarm-Out when Motion occurs.
  5 Alarm Outs are supported.
  Select an alarm-out that you want to synchronize with the current motion channel.
  Multi-selection is possible.

- Duration

  Sets the Alarm-Out Duration. Alarm-Out continues for the determined duration.
  Off / 3sec / 5sec / 10sec / 20sec / 30sec / Continuous

Video Loss Detection Setup



Video Loss Detection Setup

Cam	Video Loss State	Alarm-Out	Duration
1	Off	None	10sec
2	Off	None	10sec
3	Off	None	10sec
4	Off	None	10sec

- Video Loss State

  Off : Video Loss does not operate.
  On : Video Loss operates.

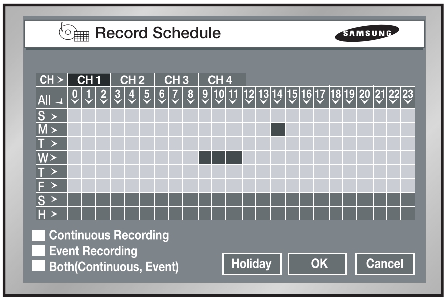
- Alarm-Out

  Selects the Alarm-Out when the current Video Loss occurs.
  3 Alarm Outs are supported in the present. Select an alarm-out that you want to synchronize with the current motion channel. Multi-selection is possible.

- Duration

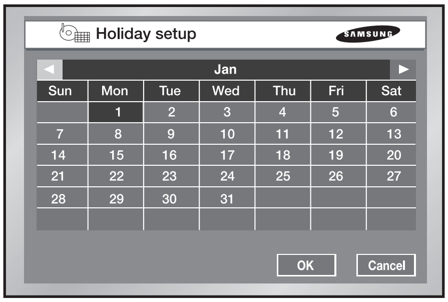
  Sets Alarm-Out Duration. Alarm-Out continues for the determined duration.
  Off / 3sec / 5sec / 10sec / 20sec / 30sec / Continuous

6 Schedule


Record Schedule
SAMSUNG
CH >
CH 1
CH 2
CH 3
CH 4
All
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
S >
M >
T >
W >
T >
F >
S >
H >
Continuous Recording
Event Recording
Both(Continuous, Event)
Holiday
OK
Cancel

This setup selects a time to record automatically.
Selection by the day or by the time is available.
The default value is set to “Event Record”.

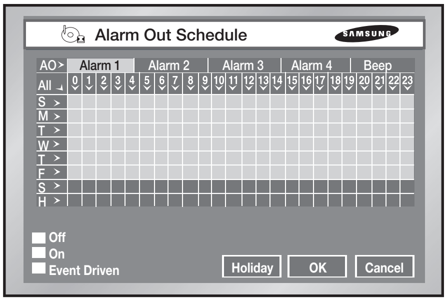
- Press “CH >” copies the value of Channel 1 to all the channels.
- The horizontal axis numbered from 0 to 23 represents the time value.
  The vertical axis numbered from S to H represents the day value. (H : Holiday)
  Selection by the day or by the time is available.
- Pressing “ALL” converts the overall setting of the selection window into Continuous → Event Record → Schedule/Event Record.
- Record Schedule
  Recording starts automatically on the preset time.
  Recording follows the condition that set in 5-18.Record Mode.
  ☛ Refer to 7-2 Record Schedule.
- Event Recording
  Recording starts automatically when an event (Alarm/Motion Detection/Video Loss) occurs within a setup time.
  Recording follows the condition that set in 5-20. Event Record Mode setup.
  ☛ Refer to 7-3 Event Recording.
- Schedule Record is yellow, Event Record is Blue, and Schedule/Event Record is red.
- Schedule / Event Record
  On occurrence of Event, Continuous Recording is replaced with Event Recording Mode.
- Holiday
  If you press “Holiday”, a calendar pops up and you are able to designate holidays.
  Move to a date and press “Enter” to complete designation.
  Press “Enter” once more to cancel designation.
  “H” at the bottom of the table means a holiday.


Holiday setup
SAMSUNG
◄ Jan ►
OK
Cancel

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Alarm Out Schedule

You can schedule the automatic output for alarms.

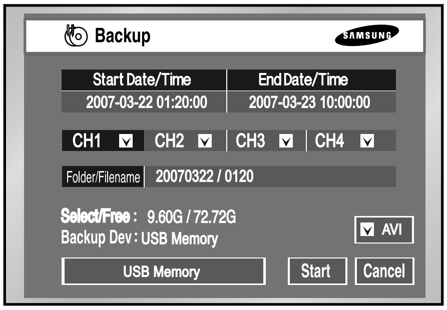

Alarm Out Schedule
SAMSUNG
AO >
Alarm 1
Alarm 2
Alarm 3
Alarm 4
Beep
All
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
S >
M >
T >
W >
T >
F >
S >
H >
Off
On
Event Driven
Holiday
OK
Cancel

The scheduling is enabled by selecting alarms, days and time blocks. The default setting is Event Driven. For each alarm or beep, you can activate or deactivate alarming. In case of Event Driven, the alarm can be sent only when an event is issued.

- AO >: It indicates Alarm Out. All alarms are changed according to Alarm1 when it pressed.
- 0 to 23: Time values for horizontal row.
- S to H: Days (Sunday to Saturday) and Holiday (H).
- ALL: Press this and it changes the overall settings in the current window to Off, On, and Event Driven.
- Off: Sets not to issue an alarm during the setting time.
- On: Sets to issue an alarm during the setting time.
- Event Driven: Sets to issue an alarm when an event occurs during the setting time.
- Holiday If you press Holiday, a calendar window appears for you to designate holidays. Place the cursor to a date and press the ENTER button to complete designation. (When pressing the ENTER button again, the setting is cancelled.)

7

Backup



Start Date/Time	End Date/Time
2007-03-22 01:20:00	2007-03-23 10:00:00

CH1 ☑ CH2 ☑ CH3 ☑ CH4 ☑

Folder/Filename 20070322 / 0120

Select/Free : 9.60G / 72.72G

Backup Dev : USB Memory

☑ AVI

- If there is a device, the free space and the backup device is displayed.
- Select a date, time, and camera No. to backup, and press "Start".
- When you change Start Date/Time or End Date/Time, free space keeps updated in the Free Space zone. But the Select/Free values are displayed when you have marked the Check box.
- A file name is composed of Folder/File Name. A folder is composed of the backup date(YYYYMMDD) while a file name is composed of the time(HHMM). A file may be renamed by the virtual keyboard. It can display up to 4 letters for a file name.
- When there is no file name, the default name is hhmm. The backup menu's virtual keyboard does not support special keys or the space bar.
- If there is no backup device, Warning sign pops up. Select and connect Backup Device in 5-8.HDD Setup and proceed the backup.
- Press the "Stop" to stop the backup.
- Pressing Cancel during the Backup returns to the upper menu but this does not affect the backup process.
- A USB CD/DVD and built-in CD can only set up AVI. You can play back an AVI backup in a PC. The USB memory can be set up for AVI check.

Caution

[In Backup Process]

If you press Exit while the backup is in progress, the screen goes to the upper menu but it does not affect the backup process. Press "Stop" to stop the backup. The speed of the set may down during the backup.

- When backing up to USB CD/DVD or memory, you must use a smaller capacity than the device's true capacity. (Part of the capacity is used for the system)

- It doesn't support backing up with memory cards, flash cards, and memory sticks such as SD, CF, MMC, etc. Also, it doesn't support USB backup with the adapters of the devices listed above.

- A USB CD/DVD and built-in CD can only set up AVI. You can play back an AVI backup in a PC.

- The USB memory can be set up for AVI check.
When there is no file name, the default name is hhmm.
The back up menu's virtual keyboard does not support special keys or the space bar.

- The file name is created with the start time of backup data. (YYYYMMDD)/(HHMM+ four digits of the serial number)
The backup file can be separated in the following conditions:

- Different units in file size (1GB for DVD, 2GB for others)

- Change in recording conditions

- Discontinuous recording data

- When the CD or DVD is malfunctioning, the USB CD/DVD or built-in CD tray opens and closes, the backup will fail. In this case when the backup fails due to media malfunction, try to backup again after changing to a new media.

Warning

The backup data could be damaged by the state of writing surface of disk in the case of CD/DVD backup.

Note

- SHR-2042 supports the internal CD-R/W.

- In case of AVI backup, the backup playback is available in the PC, but it is not available in the DVR.
Codec is required to play an AVI backup file, which is also copied along with the installation file in the AVI backup process. Run a codec setup file, "MP4Codec.exe", to install the codec on the PC.
"INDEX.xml" is included in the AVI backup file, which enables you to check and enjoy a desired file at your convenient time.

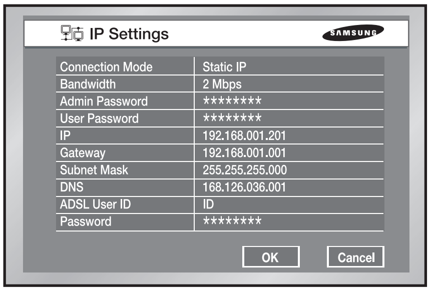
- In case of USB external HDD and USB Flash Memory, the backup is available only with formatting FAT32 partition.
To format FAT32, Format the device as FAT32 in the PC or erase the device in the Storage Setup menu, which enable to backup files.

- In case of back-up devices, please check the compatibility list of the storage devices. The list of the compatible devices with Samsung DVR can be obtained from your vendor.

- The backup of the AVI format may take longer depend on a number of the channel and the DVR operation environment (e.g. recording, network)

8 Network

IP Setup



Connection Mode	Static IP
Bandwidth	2 Mbps
Admin Password	********
User Password	********
IP	192.168.001.201
Gateway	192.168.001.001
Subnet Mask	255.255.255.000
DNS	168.126.036.001
ADSL User ID	ID
Password	********

- Connection Mode
  Designates the kind of the network connected to the main body of SHR-2040/2041/2042.
  Static IP : When the main body is connected to the network with Static IP.
  Dynamic IP : When the main body is connected to the network with Dynamic IP supplied by DHCP.
  ADSL(PPPoE) : When the main body is connected to the ADSL network with PPPoE.
- Bandwidth
  Designates the network speed to which the main body of SHR-2040/2041/2042 is connected.
  Unlimited / 2 Mbps / 1.5 Mbps / 1 Mbps / 800 Kbps / 600 Kbps / 500 Kbps / 400 Kbps / 300 Kbps / 128 Kbps
  If the connection is made via ADSL, you can only select a bandwidth of 600 kbps or less.

⚠ Caution

1. *If the main body of SHR-2040/2041/2042 is connected to a high-speed network like LAN, you are recommended to set the bandwidth to higher than 1 Mbps.*
2. *If the device is connected to a network with ADSL or low bandwidth, set the bandwidth not to exceed 600kbps, and set the recording mode not to exceed CIF (standard).*
   Setting up to a high bandwidth or recording mode on a network environment supporting low bandwidth may cause a network overload, therefore connection with the smart viewer or image monitoring may not operate properly.
3. *When connection mode is set to ADSL, the IP settings page's bandwidth is set at 300kbps and the protocol setting page's protocol adapter is set to TCP.*

Note

In case of ADSL, the Protocol type is fixed to TCP.

- Admin Password
  Used for the connection between Smart Viewer and the set with the authority of Admin.
  The password can be input 8 digits in maximum.
  Press "Enter" and the left numeric keys from 1 to 4 for setup.
  The default password for ADMIN is 4321.
- User Password
  Used for the connection between Smart Viewer and the set with the authority of user.
  The password can be input 8 digits in maximum.
  Press "Enter" and the left numeric keys from 1 to 4 for setup.
  The default password for USER is 4321.

- IP
  Sets the IP address for the main body of SHR-2040/2041/2042 to connect with the network.
  If the Connection Mode is set to Static IP, you shall type in IP yourself. If the connection mode is Dynamic IP or ADSL(PPPoE), the IP allocated by the DHCP server or ADSL company will be automatically displayed. In case of failure of DHCP or ADSL connection, 000.000.000.000 will be displayed. Then, press OK to retry connection to get IP. If you continue to fail in DHCP or ADSL connection, keep the main body of SHR-2040/2041/2042 off for a while and turn it on for retry.
- Gateway
  Sets the Gateway Address in the SHR-2040/2041/2042 main body.
- Subnet Mask
  Sets the Subnet Mask Address in the SHR-2040/2041/2042 main body.
- DNS
  Sets the DNS Address in the main body of SHR-2040/2041/2042. The default value of DNS is 168.126.63.1. Generally, you don't have to alter the DNS default but you may be hard to connect to the network sometimes if you use DHCP or ADSL. In this case, call the network manager or ADSL company to set up a new DNS address.
- ADSL User ID
  If the main body of SHR-2040/2041/2042 is connected with the ADSL(PPPoE) network, input User ID subscribed to the ADSL company. You may input User ID with a Virtual keyboard as long as 40 digits irrespective of alphabets, numbers, or symbols.
- Password
  If the main body of SHR-2040/2041/2042 is connected to the ADSL(PPPoE) network, input the user password subscribed to the ADSL company. You may input the password with a Virtual keyboard as long as 40 digits irrespective of alphabets, numbers, or symbols.

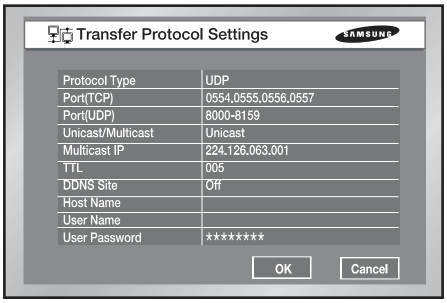
⚠ Caution

Be sure to set IP/Port/SubnetMask/Gateway/DNS to let Smart Viewer connect with the main body of SHR-2040/2041/2042.
Wrong IP/Port/Gateway/SubnetMask/DNS may prevent Smart Viewer from being connected to the main body of SHR-2040/2041/2042.
Please call the network manager or ADSL company to get each setting value.

⚠ Caution

In case of ADSL, the audio is not played in the SmartViewer.

Transfer Protocol Settings



Protocol Type	UDP
Port(TCP)	0554.0555.0556.0557
Port(UDP)	8000-8159
Unicast/Multicast	Unicast
Multicast IP	224.126.063.001
TTL	005
DDNS Site	Off
Host Name	
User Name	
User Password	********

- You may select either TCP or UDP for the protocol type.
  If you select ADSL from the IP setup page, only TCP is available.
  While TCP is selected, Audio transmission is not available.
- The available Port(TCP) ranges from 554 to 2046 and the port number will be changed by 4. Once the first digit is determined, the following 3 digits will change accordingly.
- The available Port(UDP) ranges from 8000 to 9760 and the port number will be changed by 160. Once the first digit is determined, the remaining digits will change accordingly.
- Unicast is set to the default value and Multicast can be selected in Unicast / Multicast.
- Multicast IP will be activated and its setup is available only when Multicast is selected from Multicast/Unicast.. Select a number from 224.0.0.0 to 239.255.255.255 for the D-Class IP address.
- TTL will be also activated and the value from 1 to 255 can be set only when Multicast is selected from Multicast / Unicast. The default value is 5.
- DDNS Setup
  - You may select the DDNS Site as Off, Samsung DDNS, dyndns.com, no-ip.com, or changeip.com.
  - If you select Off, the IP will not be registered in DDNS.
  - If you select Samsung DDNS, the IP will be registered in the DDNS operated by Samsung. Select MAC Address as the Address Type in the Setup → Site Setup → DVR regis tration window of the SmartViewer, and enter the MAC Address of, then you can connect remotely using the Samsung DDNS.
  - dyndns.com, no-ip.com, and changeip.com are free Public DDNS websites that a URL can be allocated by registering a Dynamic IP.
    Become a member of the desired website, register the URL, and then set up your Host Name, User Name, and User Password.
    Select URL as the Address Type in the Setup → Site Setup → DVR registration win dow of SmartViewer, and enter the Host Name (URL) that is allocated by the Public DDNS website, then you can connect remotely using the URL.

Note

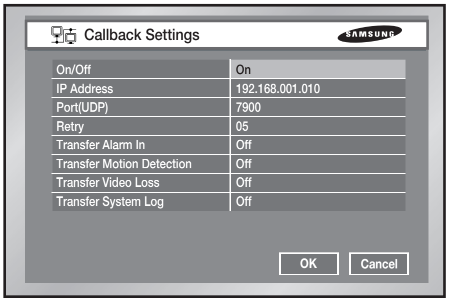
If you set up the Public DDNS (dyndns.com, no-ip.com, or changeip.com), it will take approximately 30-60 seconds for the IP address of the Host Name (URL) to be updated in the DNS.

Note

If you want to connect IP Router with the main body of SHR-2040/2041/2042, you shall designate a port for SHR-2040/2041/2042 in the IP Router setup menu.
The main body of SHR-2040/2041/2042 uses 4 ports for TCP communication.
In addition, if you want to use the DHCP function backed by IP Router to allocate Dynamic IP to the main body of SHR-2040/2041/2042, you shall designate a port for the IP which SHR-2040/2041/2042 has been allocated by the IP Router setup menu.
If you use IP Router, you are recommended to rather determine IP and Port numbers to be allocated to the main body of SHR-2040/2041/2042 from the IP Router setup menu, set the connection mode to Static IP for the main body of SHR-2040/2041/2042, and input the determined IP and Port number in IP Router than use the DHCP function.
Please refer to the IP Router User's Manual or call the manufacturer to set up IP Router.

Callback Settings

- The Callback function is used to forward a callback message to the IP where SmartViewer is in action in case Alarm, Motion Detection, or Video Loss event occurs.



On/Off	On
IP Address	192.168.001.010
Port(UDP)	7900
Retry	05
Transfer Alarm In	Off
Transfer Motion Detection	Off
Transfer Video Loss	Off
Transfer System Log	Off

- On/Off : Off is default but you may choose On.
- IP Address : IP setting is available only when On is selected from On/off Setting.
  Select the IP address of PC where SmartViewer is in action.
- Port(UDP) : You may choose one from 7900 to 7999 and the number changes by 1.
  Selects the Port value for the Callback Connection menu from SmartViewer Setup.
- Retrial : You may choose one from 1 to 20 and the number changes by 1.
- Transfer Alarm In: Set it to On to display alarms on Smart Viewer.
- Transfer Motion Detection: Set it to On to display motion detection events on Smart Viewer.
- Transfer Video Loss: Set it to On to display video loss events on Smart Viewer.
- Transfer System Log: Set it to On to display system logs such as critical system failures.

Caution

- Though Callback is set to ON, any Callback message will be created unless Alarm, Motion Detection, and Video Loss are set by EventRecord.
- Unless the Callback button is clicked, SmartViewer does not receive any Callback message.

9 Network Setup

Port Setup for SmartViewer Connection

- The Port value for DVR registration of SmartViewer (Setup → Site Setup) shall be as same as that of the set (TCP).

- If you want to use the IP Router, you shall forward the activated Port depending on the current setting value.
  - If set to TCP, allocate 4 ports to the IP Router whose Port(TCP) was set.
  - If set to UDP, allocate 4 ports whose Port(TCP) was set and 160 ports whose Port(UDP) was set to the IP Router.

In the event of TCP Setup from Transfer Protocol Setup Page

- The ports allocated to Port(TCP) will be used for SmartViewer connection control and stream forwarding.

In the event of UDP Setup from Transfer Protocol Setup Page

- The ports allocated to Port(TCP) will be used for SmartViewer connection control and the ports allocated to Port(UDP) will be used for stream transfer.

- If you set to Multicast
  - Both MultiCast IP and TTL Setup will be activated.
  - MultiCast IP means the group address(D-Class IP Address : 224.0.0.0 ~ 239.255.255.255) for MultiCast Forwarding.
  - TTL(Time To Live) indicates how many Routers will be passed for MultiCast Forwarding.
  - When you are unable to use Multicast by the Network(LAN or ADSL) characteristic as both Set and SmartViewer are installed, the message, “Not Connected” will be displayed in the SmartViewer screen. Please alter the TCP or UDP(Unicast) setting value.

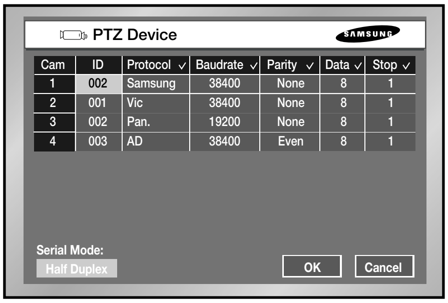
- In the event of poor image from SmartViewer
  - When the bandwidth of the network where Set is installed is smaller than the quantity of transfer stream packet, the image is sometimes poor. Set the IP setup bandwidth lower than the current setting value. (In case of ADSL, it is recommended 300Kbps or 600Kbps for the bandwidth.)
  - If this effort is no use, alter the protocol type to TCP.

Chapter 6
PTZ Camera Control

1

PTZ Camera Control Mode

- Select a proper PTZ camera Configuration value in MENU to enter PTZ Control Mode.

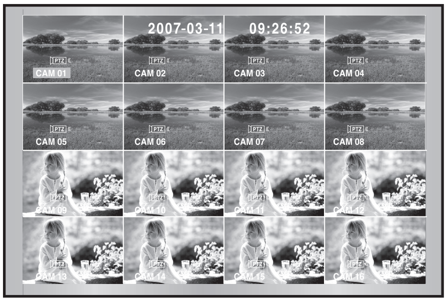


PTZ Device

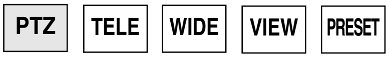
Cam	ID	Protocol ✓	Baudrate ✓	Parity ✓	Data ✓	Stop ✓
1	002	Samsung	38400	None	8	1
2	001	Vic	38400	None	8	1
3	002	Pan.	19200	None	8	1
4	003	AD	38400	Even	8	1

Serial Mode: Half Duplex

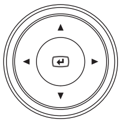
- Selected in MENU, the PTZ symbol(PTZ) is displayed on the channel in the screen.
- If you press the Enter(↵) button among direction keys in front of Split Screen, a blue bar will appear in the monitor screen. Use direction keys to move this bar until you reach the channel with the PTZ symbol and press the PTZ button in front of SHR-2040/2041/2042 to enter PTZ Camera Control Mode.
  If you succeed in entering PTZ Camera Control Mode, the PTZ symbol on the monitor screen will turn yellow from white while the PTZ button in front of SHR-2040/2041/2042 will turn blue. PTZ Camera Control Mode supports Pan, Tilt, and Zoom operation.



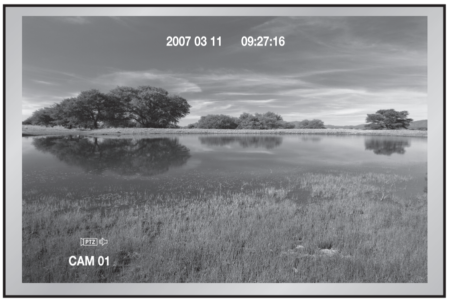
2007-03-11 09:26:52
PTZ
CAM 01
CAM 02
CAM 03
CAM 04
CAM 05
CAM 06
CAM 07
CAM 08
CAM 09
CAM 10
CAM 11
CAM 12
CAM 13
CAM 14
CAM 15
CAM 16

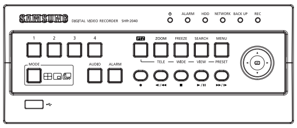


PTZ
TELE
WIDE
VIEW
PRESET

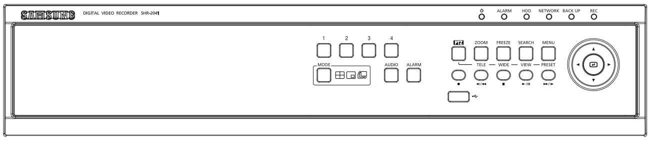


- Other PTZ Camera Control Modes perform its control in a single screen. Press the channel selection button in the left front to select the PTZ setting channel and press the PTZ button. If you succeed in entering Single Screen PTZ Camera Control Mode, the PTZ symbol on the screen will turn yellow from white while the PTZ button will turn blue. Single Screen PTZ Camera Control Mode supports Pan, Tilt, and Zoom operation basically and Preset, Camera Menu, and other functions additionally.

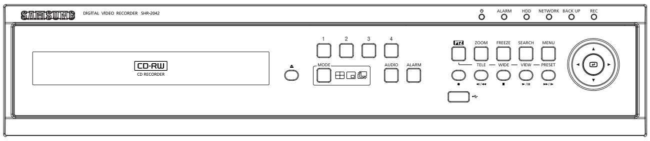

2007 03 11 09:27:16
PTZ
CAM 01


SAMSUNG
DIGITAL VIDEO RECORDER SHR-2040
ALARM
HDD
NETWORK
BACK UP
REC
1
2
3
4
PTZ
ZOOM
FREEZE
SEARCH
MENU
MODE
AUDIO
ALARM
TELE
WIDE
VIEW
PRESET

[SHR-2040]


SAMSUNG
DIGITAL VIDEO RECORDER SHR-2041
ALARM
HDD
NETWORK
BACK UP
REC
1
2
3
4
PTZ
ZOOM
FREEZE
SEARCH
MENU
MODE
AUDIO
ALARM
TELE
WIDE
VIEW
PRESET

[SHR-2041]


SAMSUNG
DIGITAL VIDEO RECORDER SHR-2042
ALARM
HDD
NETWORK
BACK UP
REC
CD-RW
CD RECORDER
1
2
3
4
PTZ
ZOOM
FREEZE
SEARCH
MENU
MODE
AUDIO
ALARM
TELE
WIDE
VIEW
PRESET

[SHR-2042]

- Press the PTZ button in Live Mode to cancel PTZ Camera Control Mode. After cancellation, the PTZ symbol on the screen will turn white from yellow while the PTZ button will lose its blue light.

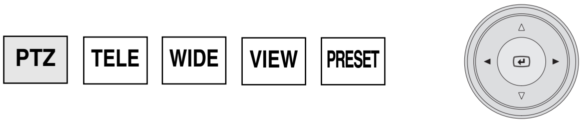
Note

You cannot use the PTZ device device and remote control device at the same time, because of communication problems.
In PTZ control mode, DVR's PTZ mode is canceled when remote control mode is connected, and the remote control device is disconnected when the DVR changes to PTZ mode while controlling the DVR with a remote control device.
Refer to the remote control device manual on how to control the DVR's PTZ device in the remote control device.
When using the remote controller (SCC2000), direct camera control is available only for Samsung Protocol in the remote controller (refer to the SCC2000 user manual). If there is no PTZ control within the maximum 5 minutes in DVR, the PTZ mode is cancelled automatically. It is for PTZ control in the remote viewer while not controlling PTZ.

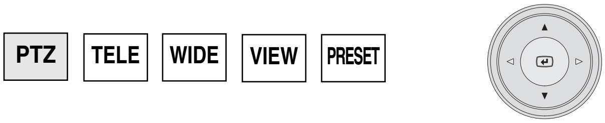
2

Basic Operation of PAN, TILT, & ZOOM

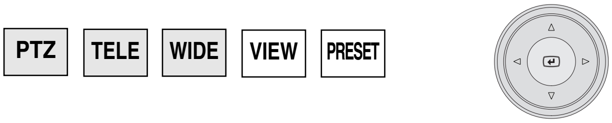
- PAN
  Press the LEFT or RIGHT button in front SHR-2040/2041/2042 in PTZ Camera Control Mode to control PTZ Camera horizontally.


PTZ
TELE
WIDE
VIEW
PRESET

- TILT
  Press the UP or DOWN button in front SHR-2040/2041/2042 in PTZ Camera Control Mode to control PTZ Camera vertically.


PTZ
TELE
WIDE
VIEW
PRESET

- ZOOM
  Press the TELE/WIDE button in front SHR-2040/2041/2042 in PTZ Camera Control Mode to zoom in or out PTZ Camera.


PTZ
TELE
WIDE
VIEW
PRESET

3

Preset Setup

- Records a certain position of PTZ Camera.
- Memorizes up to 20 PTZ Camera positions at the moment.

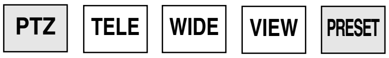
Note

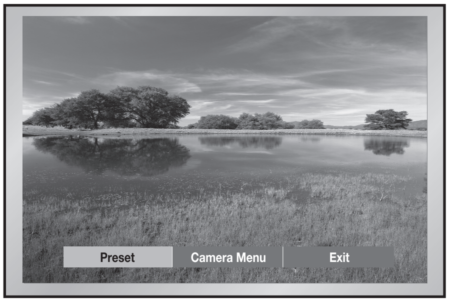
For AD Protocol PTZ Camera, this memorizes only 7 Presets.

Caution

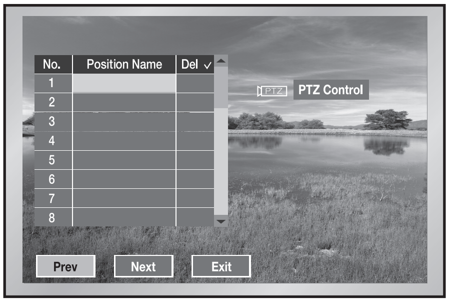
When using a remote control device (SCC2000), it is possible to control the camera with the remote control limited to the Samsung protocol. (refer to SCC2000 user manual) If there is no PTZ control for 5 minutes from the DVR, PTZ mode is automatically cancelled.
This is to control PTZ with the remote viewer when there is no PTZ control.

- Press the Preset button in front of SHR-2040/2041/2042 in Single Screen PTZ Camera Control Mode to set up Preset.


PTZ
TELE
WIDE
VIEW
PRESET


Preset
Camera Menu
Exit

- After Preset setup, press ENTER.

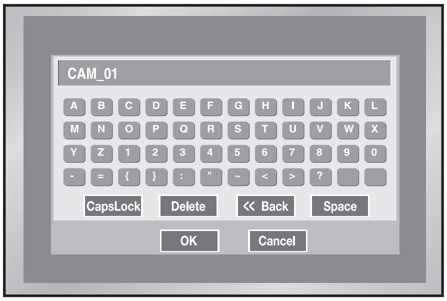


No.	Position Name	Del ✓
1		
2		
3		
4		
5		
6		
7		
8		

PTZ
PTZ Control
Prev
Next
Exit

- Move the cursor to right and press ENTER in PTZ Control Mode first. Then, press the “Enter” to run P/T/Z/ operation mode in the PIP screen and press the “Enter” again to cancel P/T/Z/ Motion Mode.

- Press Enter at the Position Name position to see Virtual Keyboard. Enter the type position name and press the “OK” to save the position and position name.



CAM_01

A B C D E F G H I J K L
M N O P Q R S T U V W X
Y Z 1 2 3 4 5 6 7 8 9 0
- = { } : " ~ < > ?
CapsLock
Delete
« Back
Space
OK
Cancel

- Press the “Del” to delete both Position and Position Name with the number.

- Click the Press Del ✓ on the top to delete all positions and position names in memory.

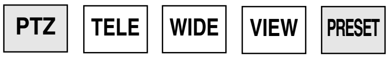
4 Camera Menu Setup

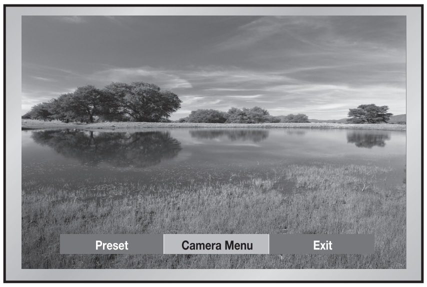
- Camera Menu is a menu supplied by PTZ Camera itself. This Menu sets up several conditions of PTZ Camera.

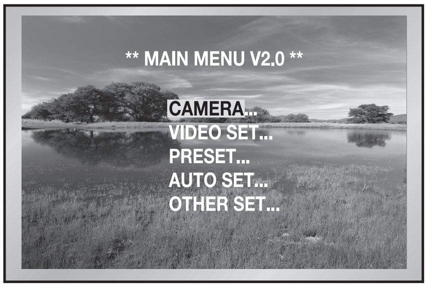
Note

Pan. or Samsung Protocol Camera only is authorized for Camera Menu setup.

- Press the Preset button in front of SHR-2040/2041/2042 in Single Screen PTZ Camera Control Mode to select Camera Menu.


PTZ
TELE
WIDE
VIEW
PRESET

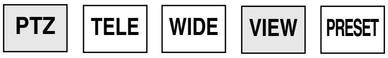

Preset
Camera Menu
Exit

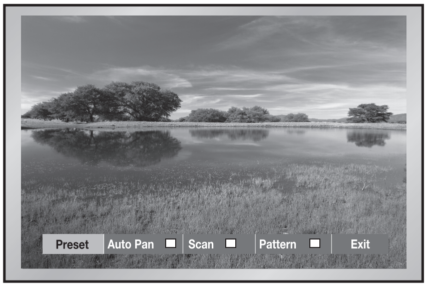

** MAIN MENU V2.0 **
CAMERA...
VIDEO SET...
PRESET...
AUTO SET...
OTHER SET...

- Press the “Preset” button in front of SHR-2040/2041/2042 to return to the upper menu from camera menu.

5 Preset View

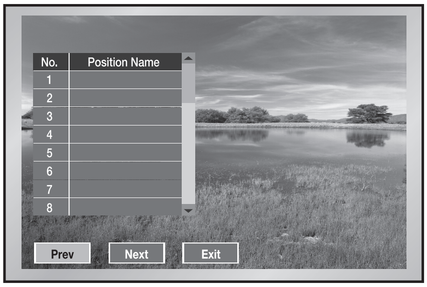
- Preset setup allows your movement to a certain saved position of PTZ Camera.
- Press the VIEW button in front of SHR-2040/2041/2042 in Single Screen PTZ Camera Control Mode to select Preset.


PTZ
TELE
WIDE
VIEW
PRESET


Preset
Auto Pan ☐
Scan ☐
Pattern ☐
Exit

(For example, Samsung Protocol)

- Control the cursor until it reaches a preset position number that you want to move and you can check it in the right PIP Screen.


No.
Position Name
1
2
3
4
5
6
7
8
Prev
Next
Exit

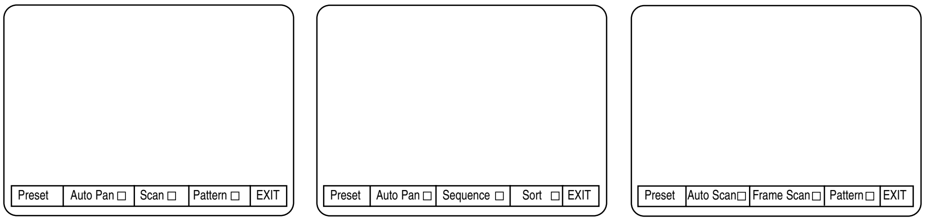
6 Other View

- Press the “VIEW” button in front of SHR-2040/2041/2042 in Single Screen PTZ Camera Control Mode to supply PTZ Camera. This is a very special function.

Note

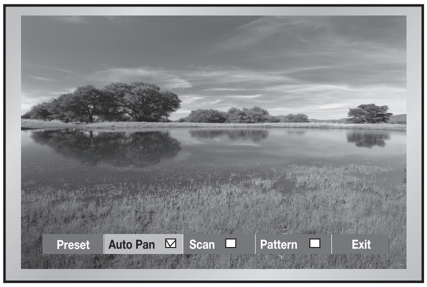
Samsung, Pan., Pel-P, or Pel-D Protocol PTZ Camera supports this function.
Samsung : Auto Pan / Scan / Pattern
Pan. : Auto Pan / Sequence / Sort
Pel(P,D) : Auto Scan / Frame Scan / Pattern

PTZ
TELE
WIDE
VIEW
PRESET


Preset
Auto Pan ☐
Scan ☐
Pattern ☐
EXIT
Preset
Auto Pan ☐
Sequence ☐
Sort ☐
EXIT
Preset
Auto Scan☐
Frame Scan☐
Pattern☐
EXIT

Samsung Pan. Pel.

- After you select a function, press Enter. Then the function will be checked and start running.
- If you select other function during the operation, the previous function will be unchecked and the current function will be checked.


Preset
Auto Pan ☑
Scan ☐
Pattern ☐
Exit

(For example, Samsung Protocol)

- If you put P/T/Z/ during the operation or enter the Preset Setup or Camera Menu Setup during the operation, the function in action will be suspended and unchecked.
- Restarting SHR-2040/2041/2042 system during the operation has no effect. The function continues its duty and remains checked.

Chapter 7
Recording

1 REC (Normal Recording)

- Pressing REC the button starts recording as set in the record mode. Then, REC LED lights on and a recording icon appears on the screen. During the recording in HDD, the front HDD LED blinks.

- During the normal recording, you can stop it by pressing the REC button.
  If the recording stops, REC LED lights out.

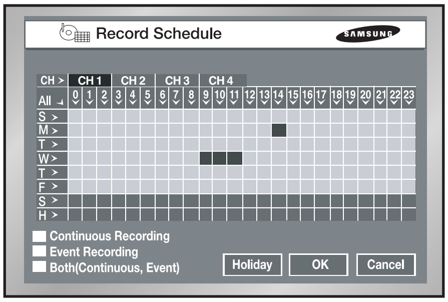
Warning

If the work that has to stop the recording(Time change, File delete, HDD connect/disconnect etc.) is performed during the recording, the current recording stops.

2

Schedule Recording

- While “Record Schedule” or “Schedule/Event recording” is selected in the Record Schedule menu, Schedule Recording automatically starts. Otherwise, Schedule Recording remains inactivated. During the Schedule Recording, Recording Icon appears on the screen. During the recording in HDD, the front HDD LED blinks.


Record Schedule
SAMSUNG
CH >
CH 1
CH 2
CH 3
CH 4
All
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
S >
M >
T >
W >
T >
F >
S >
H >
Continuous Recording
Event Recording
Both(Continuous, Event)
Holiday
OK
Cancel

- If the Event Recording is selected, the recording starts at the every event. In this case, the channel’s event recording setup is saved as setup in the event recording mode setup sub-menu (resolution, recording quality, recording ips, pre-event, post-event) of the event recording menu.

Note

Even in case of an event, Event Recording will not start unless Event Recording or Schedule/Event recording is selected in the Schedule Recording.

Warning

If the work that has to stop the recording(Time change, File delete, HDD connect/disconnect etc.) is performed during the recording, the current recording stops.

3 Event Recording

- Alarm Detection
  Sensor operation mode in Alarm of Event Record menu shall be set to N.O (Normal Open) or N.C (Normal Close).

- Motion Detection
  Motion detection in the Event Recording menu shall be set to On.

- Video Loss Detection
  Video Loss in Event Record menu shall be set to On.

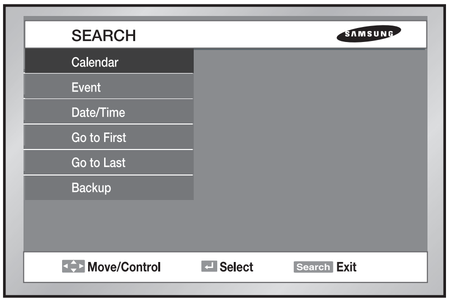
- Event Recording Mode
  Sets the recording type when an event occurs. In particular, depending on PreAlarm Off or PostAlarm Off, PreAlarm or PostAlarm Recording is disabled respectively.

Warning

If the work that has to stop the recording(Time change, File delete, HDD connect/disconnect etc.) is performed during the recording, the current recording stops

Chapter 8
Search and Play

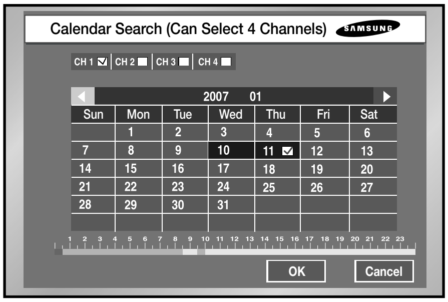
Before Use


SEARCH
SAMSUNG
Calendar
Event
Date/Time
Go to First
Go to Last
Backup
Move/Control
Select
Search Exit

- Pressing the "SEARCH" button shows Search Menu on the screen as seen above.
- Calendar Search searches a video file by the use of a calendar at the desired time.
- Event Search searches a video file recorded by the occurrence of event.
- Date/Time Search searches a video file by the entering of a day and time.
- "Go To First" searches a video file from the oldest one.
- "Go To Last" searches a video file from the latest one.
- Backup Search searches backed-up video file.
  - You can search for images on a USB HDD and USB memory.
  A USB CD/DVD and built-in CD are played as AVI backups on a PC.

1

Calendar Search



Calendar Search (Can Select 4 Channels)

CH 1 ☑ CH 2 ☐ CH 3 ☐ CH 4 ☐

2007 01

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11 ☑	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

- Be sure to select both the channel and the date to search. And press the [OK] button to search for the desired time.

- Use a calendar to search the video file of desired time. Four channels in maximum are in the range of search.

- Select the channel up to 4 by the use of ◄, ► and Enter button. And then the date column will be displayed in thick blue when it has a video recorded in the channel.

- Use the ◄, ► button until you reach the Year / Month setup line and use both buttons and the “Enter” button to select Year/Month.

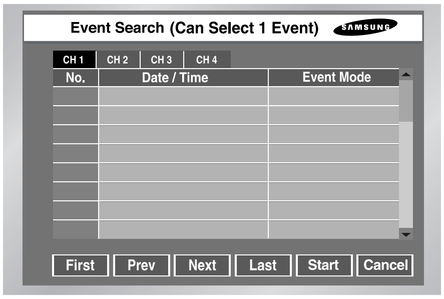
- If you select a day by the [Enter] button, a checkbox will appear on the right of the date number and the checkbox will be checked.

- Use the ▼ button until you reach the Time bar and move to the time you want with the ◄, ► button, and then press the Enter button to select a time.

- If you want to start the search, press the [OK] button. And press the [Cancel] button to move to the previous menu.

- You are able to search every 30 minutes.

2 Event Search



- Searches Normal Recording, Schedule Recording, Alarm Recording, Motion Recording, and V.Loss(Video Loss) Recording by the time.

- You shall select a channel to search to see the event information of the channel.

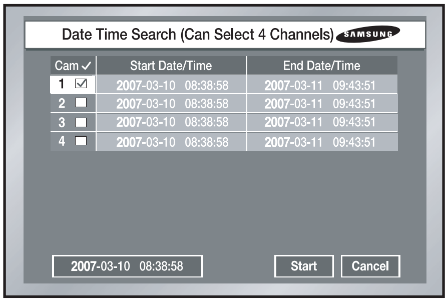
- On the basis of event information for each channel, the system searches a video file for the event. Only one channel is allowed for video search.

- If you use both the [Enter] button and the ◄, ► button key to select a channel, the system will show the list of event for the selected channel only.

- After channel selection, you can use the ▲, ▼ [Enter] button to select an event out of the list. The checkbox on the left of the selected event number will be checked.

- If you want to start the search, use the ▼ button until you reach [START] and press the [Enter] button. If you want to cancel the search, move to the [Cancel] and press the [Enter] button. If you wish to view the event list of the next screen, select [NEXT] and press the [Enter] button and if you wish to view the event list of the previous screen, select [PREV] and press the [Enter] button.

3 Date/Time Search



Date Time Search (Can Select 4 Channels)

Cam ✓	Start Date/Time	End Date/Time
1 ☑	2007-03-10 08:38:58	2007-03-11 09:43:51
2 ☐	2007-03-10 08:38:58	2007-03-11 09:43:51
3 ☐	2007-03-10 08:38:58	2007-03-11 09:43:51
4 ☐	2007-03-10 08:38:58	2007-03-11 09:43:51

2007-03-10 08:38:58

- Use the Date/Time information to search a video file at the time as you desire. Up to 4 channels can be searched at once.

- After you select a channel with the ▲, ▼, [Enter] button, the checkbox on the right of selected event number will be checked.

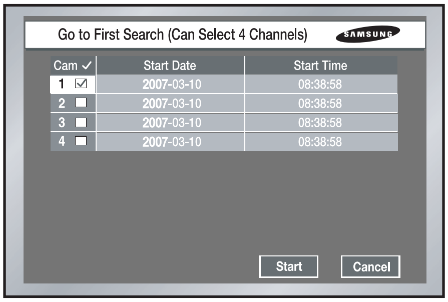
- Use the ▼ button until you reach the Search Time setup line. Press the [Enter] button to change the search time. Search Time change will be done by the Year/Month/Day/Hour/Minute/ Second unit with the ▲, ▼, button. For your convenience, you may hold on a key to change the value continuously.

- If you want to start the search, use the ▼ button until you reach [START] and press the [Enter] button. If you want to cancel the search, move to the [CANCEL] and press the [Enter] button.

- The time information, 2007-03-10 08:38:58 on the bottom left corner, represents the time when play starts.

4

Go to First Search



Go to First Search (Can Select 4 Channels)

Cam ✓	Start Date	Start Time
1 ☑	2007-03-10	08:38:58
2 ☐	2007-03-10	08:38:58
3 ☐	2007-03-10	08:38:58
4 ☐	2007-03-10	08:38:58

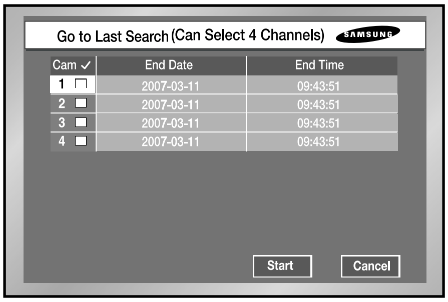
- Searches the oldest one among recorded video files. Up to 4 channels can be searched at once.

- After you select a channel with the ▲, ▼, [Enter] button, the checkbox on the right of the selected channel number will be checked.

- Press the [Start] button want to start the search and to cancel. And press the [Cancel] button to cancel the search.

5

Go to Last Search



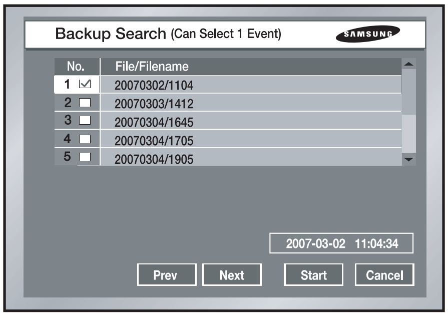
Go to Last Search (Can Select 4 Channels)

Cam ✓	End Date	End Time
1 ☐	2007-03-11	09:43:51
2 ☐	2007-03-11	09:43:51
3 ☐	2007-03-11	09:43:51
4 ☐	2007-03-11	09:43:51

- Searches the latest one among recorded video files. Up to 4 channels can be searched at once.
- After you select a channel with the ▲, ▼,[Enter] button, the checkbox on the right of the selected channel number will be checked.
- Press the [Start] button want to start the search and to cancel. And press the [Cancel] button to cancel the search.
- If you start Go To Last Search during recording, the system will search the video image right at the time of entering Search.

6

Backup



Backup Search (Can Select 1 Event)

No.		File/Filename
1	☑	20070302/1104
2	☐	20070303/1412
3	☐	20070304/1645
4	☐	20070304/1705
5	☐	20070304/1905

2007-03-02 11:04:34

- First, select the backup device.
- Mark the data of device.
- Select the file name to backup, and the detail information of a file is displayed in the below.
- The [Previous] button shows the previous page.
- The [Next] button shows the next page.
- The [Start] button plays the desired file.
- The [Exit] button exits the menu.

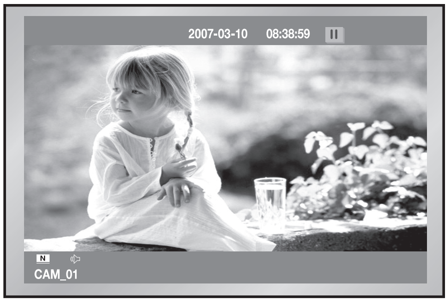
7 Playback

- Press the PLAY/PAUSE button(►/II) to play the data recorded in HDD.
- If you used the SEARCH button for playback just before, the system would remember the information of the played channel until you click the PLAY/PAUSE button(►/II) again, then the system plays the previous channel.
  If you press the PLAY/PAUSE button(►/II), the Search Menu will appear as far as you never tried the playback.

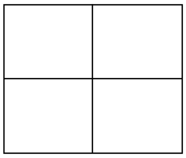
Note

Pressing the PLAY button(►/II) does not affect the playback as far as the user stays in the MENU. Be sure to exit from the MENU to start the playback.

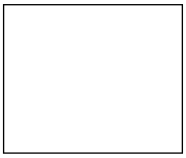
- Press the STOP button(■) to stop the playback. If you press the Playback/PAUSE button(►/II) once more, the recording will resume from the point where the previous recording stops. When the data position reaches the end of HDD during the playback, the playback will be paused.



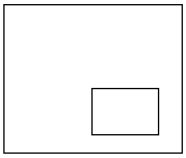
- Definition Play Screen Mode



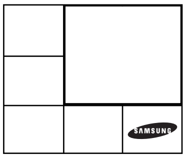
4 Split Screen



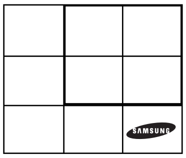
Single Screen



PIP Screen



6 Split Screen



9 Split Screen

① 4 Split Screen : If you select more than a channel, 4 Split Screen will appear.

② Single Screen : This appears when you select one channel in Search. If you press the [CH1~CH4] button in the other split screen, the selected channel appears with the single screen. If you press the ZOOM button in the single screen, the selected area will be enlarged by twice. And you can move the zoom area by the use of direction key.

③ PIP Screen : If you press the Mode button while the single screen plays, PIP Screen will appear(The large screen displays the channel in play while the small screen on the bottom right corner displays a Live channel in PIP type). Use the UP and DOWN key to move small PIP screen (Live Channel) vertically. If you press the [ENTER] button, a blue bar will appear in the live screen and if you press the Channel button, you will be able to turn to the channel selected by the live screen.

④ 6 Split Screen : If you press the Mode button in the single screen, 6 split screen will appear. The single screen in playing is displayed at the top of right, and the 4 live screens are displayed at the bottom of left.

⑤ 9 Split Screen : If you press the Mode button in the 4 split screen, 9 split screen will appear. The 4-split screen in playing is displayed at the top of right, and 4 live screens are displayed at the bottom of left.

- Play at Faster Speed

  If you press the LEFT or RIGHT button(◀◀/▶▶) during the playback, you will be able to see the screen at the x2, x4, x8, x16, x32, and x64 speed either forwardly or reversely.

- Viewing Still Screen

  If you press the LEFT or RIGHT button(◀◀/▶▶) when the system paused, you will be able to see still screens forwardly or reversely.
  During the reverse search, the interval between cuts becomes long depending on the recording specification.

- Audio On/Off

  If you press the [Audio] button in other screen than 4 Split Screen(i.e. Single Screen, PIP Screen, and 9 Split Screen), you will be able to turn Audio of the playback channel on or off.
  In 4 Split Screen, Audio is not activated.

Chapter 9

Smart Viewer

1 Introduction

Smart Viewer is a program that a general PC user is able to install SHR-2040/2041/2042 to his PC to monitor the video and audio data in the real time through network without going to the site where SHR-2040/2041/2042 is installed.

2 Feature

- Thanks to the transmission of video data compressed by the MPEG-4 Video Compression method, it can play the video images of good quality.
- Thanks to the G.726 Voice Compression method, it supplies the voice data of good quality. Use of armored MIC improves the quality of remote voice.
- Thanks to the transmission of video/audio stream through RTP(Real-Time Transport Protocol), the real-time video playback is excellent and multi-users' simultaneous connection does not affect the transmission speed in whole abruptly.
- Command & Control by RTSP(Real-Time Streaming Protocol) enables safety control through the network.
- Variable transport protocols are supported (TCP/IP, UDP(Unicast, Multicast)).
- Connection is open to you at any time to monitor video and audio data by inputting IP Address only.
- You can not only perform real-time recording(*.dvr format) with User's PC whereas necessary during the monitoring but also convert recorded video files(*.dvr format) into frame unit images(JPEG format).
- Up to 3 Smart Viewer users are allowed to connect to a DVR simultaneously. (If the multicast is used, up to 6 users can connect.)
- With a Smart Viewer, you are allowed to connect to as many as 16 SHR-2040/2041/2042s to monitor them simultaneously.
- Smart Viewer is optimized in the resolution of 1024X768.

3 PC Specification(Recommendation)

- OS : Win2000, WinXP

Recommendation :	CPU Pentium 3, 1GHz or higher
	RAM 256 MB or higher
	VGA RAM 32Mb or higher
	DirectX 8.1 or higher

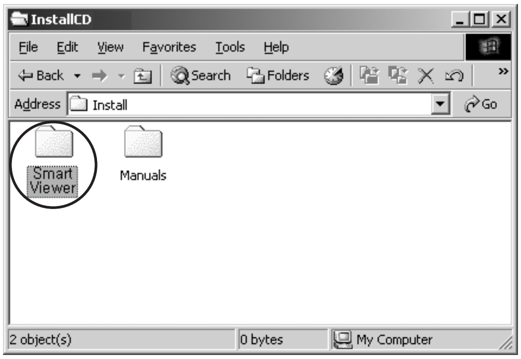
Note

Depending on Recording Rate, Video Size, and user's PC specification set to SHR-2040/2041/2042, the number of Smart Viewer playback frame varies. For the detailed specification, refer to Appendix 4.

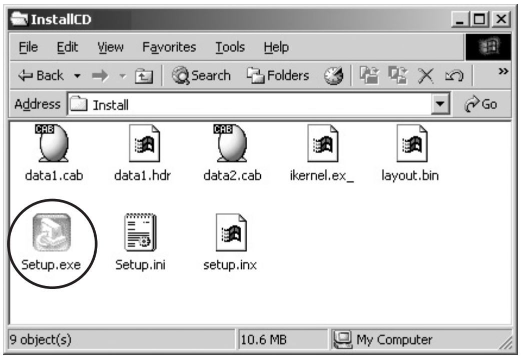
4 Smart Viewer Installation

Smart Viewer Installation

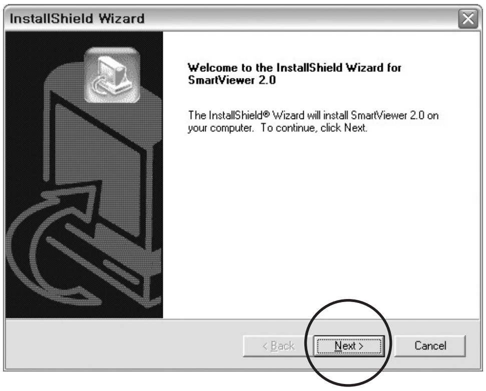
- Put a Smart Viewer Program CD in CD-ROM and open the “Smart Viewer” folder in the CD.


InstallCD
File Edit View Favorites Tools Help
Back Search Folders
Address Install Go
Smart Viewer
Manuals
2 object(s)
0 bytes
My Computer

- Run the “Setup.exe” file.


InstallCD
File Edit View Favorites Tools Help
Back Search Folders
Address Install Go
data1.cab
data1.hdr
data2.cab
ikernel.ex_
layout.bin
Setup.exe
Setup.ini
setup.inx
9 object(s)
10.6 MB
My Computer

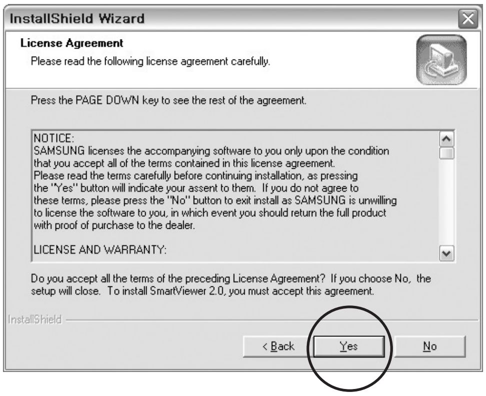
- Click the "Next" button.



Welcome to the InstallShield Wizard for SmartViewer 2.0

The InstallShield® Wizard will install SmartViewer 2.0 on your computer. To continue, click Next.

- If you agree with Smart Viewer License, click "Yes".



License Agreement

Please read the following license agreement carefully.

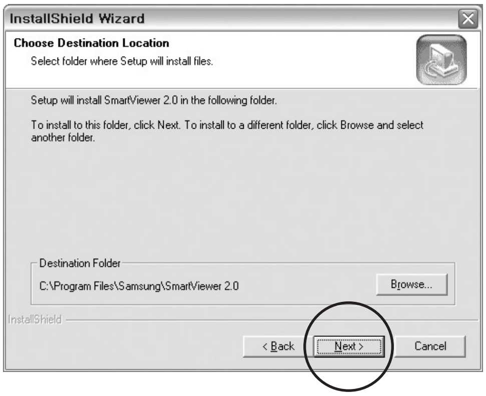
Press the PAGE DOWN key to see the rest of the agreement.

NOTICE:
SAMSUNG licenses the accompanying software to you only upon the condition that you accept all of the terms contained in this license agreement. Please read the terms carefully before continuing installation, as pressing the "Yes" button will indicate your assent to them. If you do not agree to these terms, please press the "No" button to exit install as SAMSUNG is unwilling to license the software to you, in which event you should return the full product with proof of purchase to the dealer.

LICENSE AND WARRANTY:

Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install SmartViewer 2.0, you must accept this agreement.

- Designate a folder to install Smart Viewer in it and click "Next".



Choose Destination Location

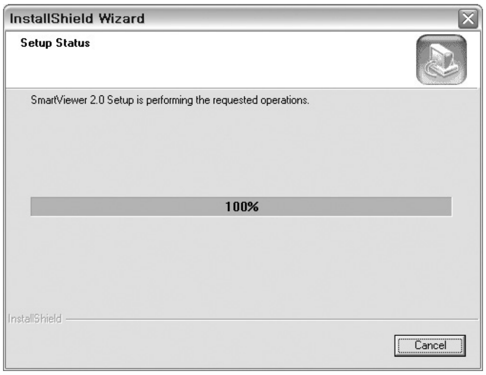
Select folder where Setup will install files.

Setup will install SmartViewer 2.0 in the following folder.

To install to this folder, click Next. To install to a different folder, click Browse and select another folder.

Destination Folder
C:\Program Files\Samsung\SmartViewer 2.0

- The system proceeds with setup file installation and system setup.


InstallShield Wizard
Cancel

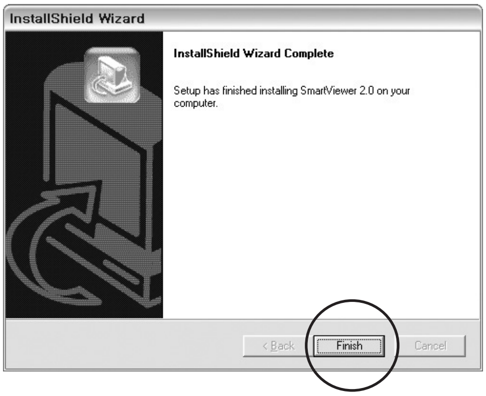
Setup Status

SmartViewer 2.0 Setup is performing the requested operations.

100%

InstallShield

- Installation is complete. Click the “Finish” to terminate the installation.


InstallShield Wizard
< Back
Finish
Cancel

InstallShield Wizard Complete

Setup has finished installing SmartViewer 2.0 on your computer.

5

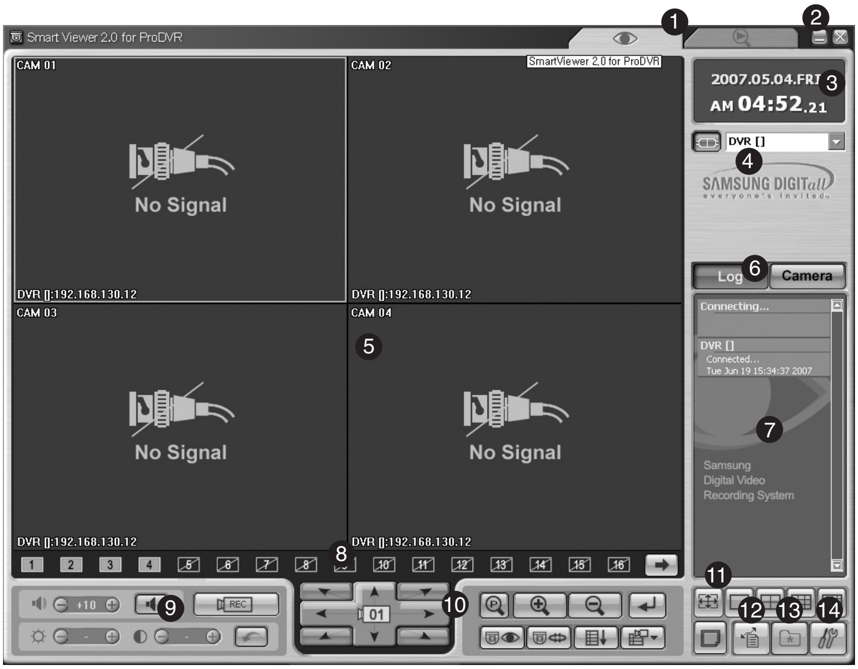
Smart Viewer Program Execution

- Double-click the Smart Viewer icon in the background screen to run the program.

SmartViewer
2.0 for
ProDVR

6 Smart Viewer Initial Screen

- Screen Description

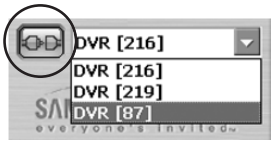

Smart Viewer 2.0 for ProDVR
SmartViewer 2.0 for ProDVR
CAM 01
CAM 02
CAM 03
CAM 04
No Signal
No Signal
No Signal
No Signal
DVR []:192.168.130.12
DVR []:192.168.130.12
DVR []:192.168.130.12
DVR []:192.168.130.12
2007.05.04.FRI
AM 04:52.21
DVR []
SAMSUNG DIGITall
everyone's invited
Log
Camera
Samsung
Digital Video
Recording System
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
+10
REC
01
1
2
3
4
5
6
7
8
9
10
11
12
13
14

Connecting...
DVR []
Connected...
Tue Jun 19 15:34:37 2007

① This is the button to enter the Search mode in which you can search and play remote the video file recorded in SHR-2040/2041/2042 and enter the Monitoring mode for real-time video monitoring.
② This button terminates or minimizes the program.
③ It displays the current date, day, and time.
④ This button is used for the connection with the preset DVR(SHR-2040/2041/2042) or site.
⑤ This screen shows the monitoring video.
⑥ These buttons select the window displays the event message and the window displays the connection condition of camera.
⑦ This window displays the event message from SHR-2040/2041/2042 in the real-time.
⑧ These buttons display the status of current channel.
⑨ These buttons adjust the audio volume and video brightness/contrast, and save the video file.
⑩ These buttons are used for PTZ related functions.
⑪ These buttons are used for screen split and Sequence Mode.
⑫ This button is used for the connection Callback.
⑬ This button is used for Favorite function when connecting to the site.
⑭ This button pops up the Setup Mode window to change Smart Viewer or SHR-2040/2041/2042 setup. (Refer to 9-30. Setup Mode.)

7 Monitoring Mode

- DVR(SHR-2040/2041/2042) / SITE Connection
  - Select the name of DVR(SHR-2040/2041/2042) or site for connection and click the connection button.

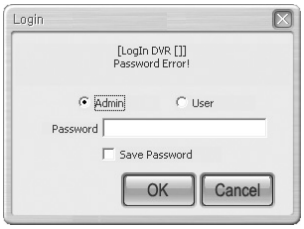

DVR [216]
DVR [216]
DVR [219]
DVR [87]

Note

You can set the name, IP, and password of DVR (SHR-2040/2041/2042) for connection in the Setup mode. Also, the site setup which permits simultaneous connection to multi-DVRs (SHR-2040/2041/2042) is available in the Setup mode. You can connect up to 16 DVRs (SHR-2040/2041/2042) at once when connecting to the site.

◆ Connection Failure Cases

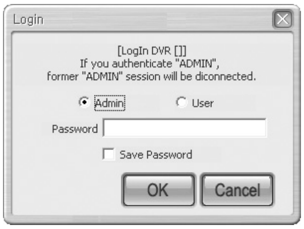
1. Password Certification Failure


Login
Admin
User
Password
Save Password
OK
Cancel

[LogIn DVR []]
Password Error!

- In case of discord between the Network password set to SHR-2040/2041/2042 and the connection password set to Smart Viewer, a window pops up to induce retry of password input.

2. Duplicate Admin User Connection


Login
Admin
User
Password
Save Password
OK
Cancel

[LogIn DVR []]
If you authenticate "ADMIN",
former "ADMIN" session will be diconnected.

- When the DVR that you want to connect to has been already occupied by an Admin user but you retry connection with the Admin privilege, the previously connected session is automatically disconnected.

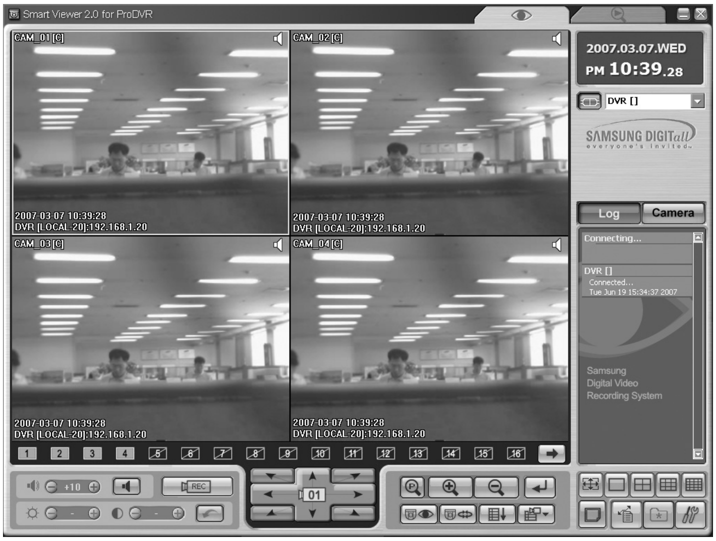
Note

No more than 3 users, one Admin. authorized user and 2 User authorized users are allowed to access SHR-2040/2041/2042 simultaneously.(In the case of multicast, 5 User authorized users are allowable.)

⚠ Caution

Once occupied by 3 users(In the case of multicast, 6 users), SHR-2040/2041/2042 does not permit more connection.

- Monitoring Mode Connection Screen


Smart Viewer 2.0 for ProDVR
CAM_01 [C]
CAM_02 [C]
CAM_03 [C]
CAM_04 [C]
2007-03-07 10:39:28
DVR [LOCAL-20]:192.168.1.20
2007.03.07.WED
PM 10:39.28
DVR []
SAMSUNG DIGITall
everyone's invited
Log
Camera
Samsung
Digital Video
Recording System
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
+10
REC
01

Connecting...

DVR []

Connected...

Tue Jun 19 15:34:37 2007

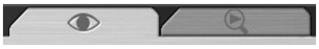
Note

When connecting with SHR-2040/2041/2042 in the 9-split mode setup, the setup, the setp is changed to the 4 split mode and 4 split screen is show After the connection, you can change it to the 9 split mode.

⚠ Caution

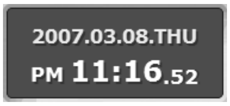
If you change the "Video size" or "Color Quality" from the setup tab of [Display Registration Information] while Smart Viewer is running, Smart Viewer will fall into an unexpected condition.
You should terminate the Smart Viewer first to change them.

- Mode Conversion Button



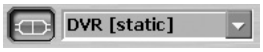
- This button converts the monitoring mode and the search mode.

- Time Information



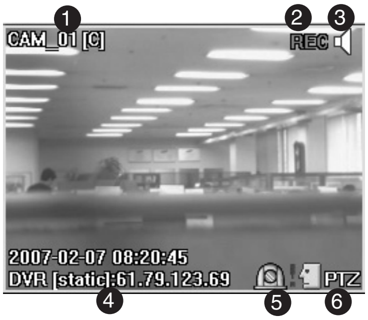
- As soon as you are connected to SHR-2040/2041/2042, the current date, day, and time of SHR-2040/2041/2042 will be displayed.
- Otherwise, the current date, day, and time of your PC will be displayed.

- Connection Information



- As soon as you are connected to SHR-2040/2041/2042, the connection button will display connection status.
- If you click the connection button here, connection will be cancelled.

- Play Screen OSD Information



① Channel no., camera name, and video size will be displayed.
Video Size : (C)CIF / (N)Normal / (L)Large
② If the Video data of the current channel are recorded in your PC, REC mark is displayed.
③ Audio ON/OFF Button is displayed.
④ The name and IP address of SHR-2040/2041/2042 in connection are displayed.
⑤ The current channel alarm status is displayed.
⑥ The controllability of the current channel PTZ is displayed.

Note

③ Clicking the speaker icon turns the audio of channel on or off.
🔈 : Audio OFF 🔊 : Audio ON

If you turn the audio of a SHR-2040/2041/2042 channel off, “Disable” will be displayed.
🔇 : Audio Disabled

✳ For the Audio on channel now, use the following audio button to adjust the volume and set the mute.

Note

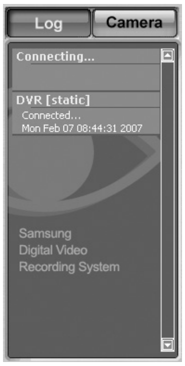
⑤ the alarm or motion detection occurs at the channel of SHR-2040/2041/2042, which is set to alarm or motion detection, it is displays on the screen in the real-time with an icon.
❗ : Motion Detection 🚨 : Alarm Event

Note

⑥ If you connect and set up PTZ Camera in SHR-2040/2041/2042, PTZ controllability for the channel will be displayed.

✳ Select a channel capable of PTZ and use the PTZ button at the bottom to control PTZ. (Refer to the description of PTZ button.)

- Event Log Display Window



Connecting...

DVR [static]
Connected...
Mon Feb 07 08:44:31 2007

Samsung
Digital Video
Recording System

- Click the Log button to activate the log display window.
- It displays the event(alarm, user connection, and setup change) occurring at SHR-2040/2041/2042 in the real-time.

Note

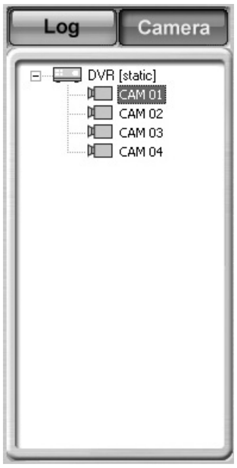
[Event Message]

► Connecting.. : Trying to connect to SHR-2040/2041/2042.
► Connected.. : Succeeded connecting to SHR-2040/2041/2042.
► Connection Failed : Failed in connecting to SHR-2040/2041/2042.
► Disconnected.. : Finished connecting to SHR-2040/2041/2042.
► Setup(Remote) : SHR-2040/2041/2042 setup at Dvr Setup of Viewer changed.
► Setup Start / End (Local) : Start/Finish the Menu screen at SHR-2040/2041/2042.
► Video Loss CH[N] : Video Loss at the N channel of SHR-2040/2041/2042 encountered.
► Time Change : Date/Time of SHR-2040/2041/2042 changed.
► Load Factory Default : SHR-2040/2041/2042 System initialized.
► Network Change : SHR-2040/2041/2042 Network setup changed.
► System Shutdown : SHR-2040/2041/2042 System terminated.
► Hdd Format : SHR-2040/2041/2042 HDD initialized.
► Disk Full : No more space in SHR-2040/2041/2042 HDD.
► Power Failure Recovery : SHR-2040/2041/2042 resumed after power failure.
► Backup Start/End/Fail/Stop : Backup at SHR-2040/2041/2042 started/finished/failed/stopped.
► Network Traffic Busy : Data transport in the network is not smooth.
► Access Denied(Limit Over) : Over connection.

Caution

When Time Change, Load Factory Default, Network Change, System Shutdown, or Hdd Format event occurs, Smart Viewer terminates the connection automatically.

- Camera connection Indication Window



- Displays the connection condition of DVR and CAMERA in the list.

Note

[DVR Icon Color]

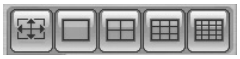
► Successfully connected to SHR-2040/2041/2042, the icon turns yellow, otherwise, turns black.

[DVR Icon Color]

► Connected to CAMERA for monitoring, the icon turns yellow.

► Connectable, the icon turns blue, otherwise, turns black.

- Screen Split Selection Button



  - Full Screen / Single / Quad / Nine-Split / Sixteen-Split Mode
  - You can change the Split Mode of the screen under monitoring.

- Sequence Mode Button

  - Changes the channel to be played at the preset interval.
  - The sequence time interval can be set at the Setup Mode → Viewer Setup.
  - In Single Mode : 1 → 2 → 3 → 4 → 1 (CH)
  - In Quad Mode : 1,2,3,4 → 1,2,3,4 (CH)
  - In Nine-Split Mode : 1,2,3,4 → 1,2,3,4(CH)
  - In Sixteen-Split Mode : 1,2,3,4 → 1,2,3,4 (CH)

Note

If you connected with multi-DVRs(SHR-2040/2041/2042) through a site, the sequence will operate as follows.

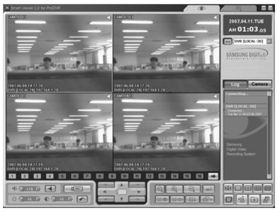
- In Single Mode : DVR1:3CH →...→ DVR1:4CH → DVR2:1CH →...→ DVR1:1CH

- In Quad Mode : DVR1:1,2,3,4CH →...→ DVR2:1,2,3,4CH

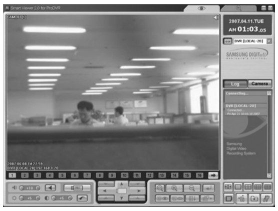
- In Nine-Split Mode : DVR1:1,2,3,4CH → DVR2:1,2,3,4CH →... DVR3:1,2,3,4CH

- In Sixteen-Split Mode : DVR1:1,2,3,4CH → DVR2:1,2,3,4CH → DVR3:1,2,3,4CH

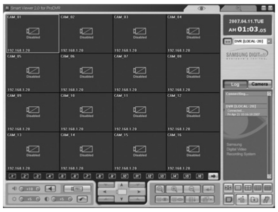
- Monitoring screen condition Information / Selection Button
  - Displays the Split or Monitoring condition of the screen in play.



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 : When monitoring with Quad Mode



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 : When monitoring with Single Mode



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 : Camera Off

Note

The number in the screen icon indicates the screen position in SmartViewer.

1 ***: The orange icon indicates the current channel is connected to a camera.***

1 ***: The gray icon indicates the current channel is connected to a camera but not displayed in the screen.***

1 ***: The black icon with a slash indicates the current channel is not connected to any camera.***

- NEXT Button

  - Click the NEXT(Mouse Left Button) to see the channel next to the current channel.
  - In Single Mode : 1 → 2 → 3 → 4 → 1 (CH)
  - In Quad Mode : 1,2,3,4 → 1,2,3,4 (CH)
  - In Nine-Split Mode : 1,2,3,4 → 1,2,3,4 (CH)
  - In Sixteen-Split Mode : 1,2,3,4 →1,2,3,4 (CH)

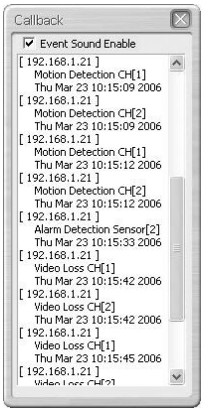
Note

If you connected with multi-DVRs(SHR-2040/2041/2042) through a site, the sequence will operate as follows.

- ***In Single Mode : DVR1:3CH →...→ DVR1:4CH → DVR2:1CH →...→ DVR1:1CH***
- ***In Quad Mode : DVR1:1,2,3,4CH →...→ DVR2:1,2,3,4CH***
- ***In Nine-Split Mode : DVR1:1,2,3,4CH → DVR2:1,2,3,4CH →DVR3:1,2,3,4CH ...***
- ***In Sixteen-Split Mode : DVR1:1,2,3,4CH → DVR2:1,2,3,4CH →DVR3:1,2,3,4CH ...***

- CALLBACK Button

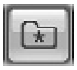
  - If you press CALLBACK, the CALLBACK window will be activated to receive messages.
  - Receiving a message, Smart Viewer automatically tries to contact a DVR.
  - In the event of Video Loss, Alarm, or Motion Detection, a message is received.
  - You can select if the alarm is set on/off when it receives an event message.



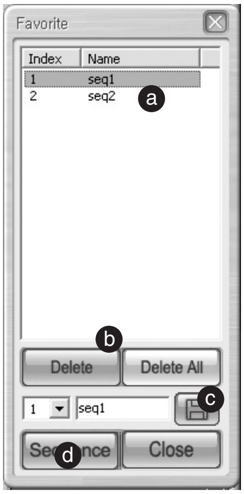
☑ Event Sound Enable

```
[ 192.168.1.21 ]
   Motion Detection CH[1]
   Thu Mar 23 10:15:09 2006
[ 192.168.1.21 ]
   Motion Detection CH[2]
   Thu Mar 23 10:15:09 2006
[ 192.168.1.21 ]
   Motion Detection CH[1]
   Thu Mar 23 10:15:12 2006
[ 192.168.1.21 ]
   Motion Detection CH[2]
   Thu Mar 23 10:15:12 2006
[ 192.168.1.21 ]
   Alarm Detection Sensor[2]
   Thu Mar 23 10:15:33 2006
[ 192.168.1.21 ]
   Video Loss CH[1]
   Thu Mar 23 10:15:42 2006
[ 192.168.1.21 ]
   Video Loss CH[2]
   Thu Mar 23 10:15:42 2006
[ 192.168.1.21 ]
   Video Loss CH[1]
   Thu Mar 23 10:15:45 2006
[ 192.168.1.21 ]
   Video Loss CH[2]
```

- FAVORITE Button



- If you press FAVORITE, the FAVORITE window will be activated.

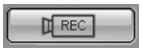

Favorite
Index
Name
1
seq1
2
seq2
a
b
Delete
Delete All
1
seq1
c
Sequence
d
Close

ⓐ If you click the current FAVORITE, the cameras saved in the current setting value will be displayed in the screen.
ⓑ You may delete the selected FAVORITE or all FAVORITE setting values.
ⓒ You may set up a new FAVORITE number and name.
ⓓ Change FAVORITE at the set intervals.

Note

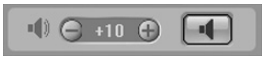
- The FAVORITE button is available only when you contact SITE.
- The FAVORITE information setting value is saved in the Config file even after you are away from the SITE.
- If you change the DVR list composing the SITE from Setup, the FAVORITE setting value will be initialized

- Video Recording Button



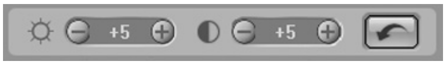
- If you select a channel in the playback and click the "Save" button, the video will be saved in a file format with the extension of *.dvr in a designated folder of your PC.
- The name of the directory in which an image will be saved, the file name, and the image save length shall be set up at the Setup Mode → Viewer Setup.
- The video length to be saved can be set from one minute to 10 minutes.
- The saved video can be played in the Local mode of Search mode.
- Click the button again to stop recording. However, manual suspension is prohibited for 10 seconds after recording started.

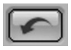
- Audio Volume Control Button



- You can control the audio volume of channel in the playback or set to mute for it.
- You can adjust the audio volume from 0 to +10.

- Video Brightness/Contrast Control button

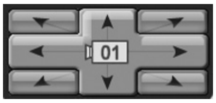


- Select the channel in the playback and use the control button(+,-) to adjust the brightness or contrast of video.
- The default value is set to +5.
- You can adjust the brightness or contrast from 0 to +10.
- Press the  button to recover the default value.

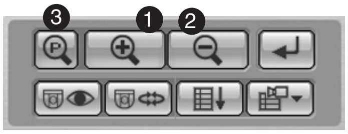
Note

The adjusted Audio volume, brightness, and contrast values will be saved in your PC and remain unchanged even if you terminate Smart Viewer and restart it.

- PTZ Camera Control Buttons



- Select a channel connected to PTZ Camera to control PTZ related functions.
- PAN Left / Right
- TILT Up / Down
- Diagonal Control
- The channel under PTZ control will be displayed in the center of the button.



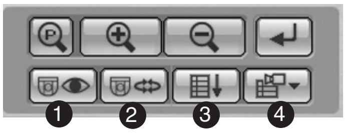
①② ZOOM IN / OUT

③ POWER ZOOM : Click P button to activate POWER ZOOM.

- POWER ZOOM is a function to zoom in or zoom out the video screen by clicking the screen.
- After POWER ZOOM is dominant, ZOOM IN / OUT will zoom in or out the video screen.
- POWER ZOOM Operation Procedure : Click POWER ZOOM → Select ZOOM IN or OUT → Click ZOOM IN or OUT zone in the video screen → ZOOM IN / OUT will be activated in the clicked zone.

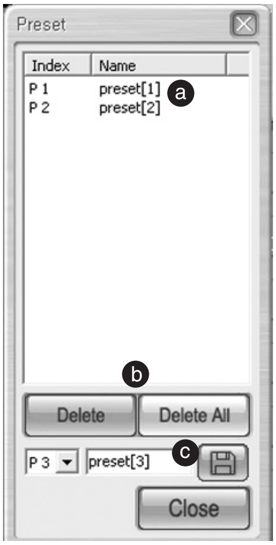
Note

The PAN / TILT / ZOOM function is supported to all the cameras.
But, POWER ZOOM is supported only by Samsung Smart Dome Camera, and assured to the operation of TILT below 45°.



① PRESET

- If you press the PRESET button, a window for PRESET setup pops up.



Index	Name
P 1	preset[1]
P 2	preset[2]

P 3 preset[3]

ⓐ If you click the current PRESET number and name, the camera will move to its position.

ⓑ You can delete the selected or all the PRESET setup values.

ⓒ You can set a new PRESET number and name.

Note

① The PRESET function is supported to all the cameras.
You are allowed to set no more than 20 PRESET items.
But, the AD Protocol camera can be set up to 7 PRESET items.

② AUTOPAN : The camera moves between starting and ending points.

③ SCAN : The camera moves circulating the preset positions.

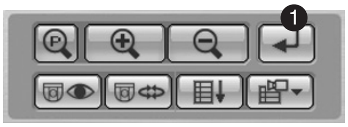
④ PATTERN : The camera moves following the route that you have defined.

Note

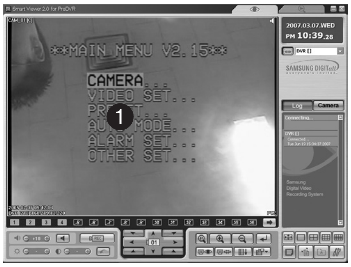
The preset function is supported by all cameras. You can set up to 20 presets. But an active directory (AD) protocol camera can have 7 presets. The names of ②, ③, and ④ may vary depending on the camera vendor. And those functions may not be supported by some product.

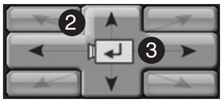
- ***Samsung cameras support those functions.***
- ***In case of Panasonic cameras, the names of AUTOPAN, SCAN, and PATTERN are as following: ② SEQUENCE ③ AUTOPAN ④ SORT.***
- ***In case of PELCO cameras, the names of AUTOPAN, SCAN, and PATTERN are as following: ② FRAME SCAN ③ AUTO SCAN ④ PATTERN.***
- ***The other cameras do not support those functions.***

- Self Menu Setup of PTZ device



① You can set the function menu in the PTZ camera.


MAIN MENU V2.15
CAMERA...
VIDEO SET...
PRESET...
AUTO MODE...
ALARM SET...
OTHER SET...
1
2007.03.07.WED
PM 10:39.28
SAMSUNG DIGITall
Log
Camera



① This is a Menu screen supplied by the camera itself, seen from Viewer.
② Use the ↑/↓/←/→ button for the movement between menus.
③ This is a button for the role of Enter.

Note

The Camera Menu Setup function is supported by Samsung and Panasonic camera only.

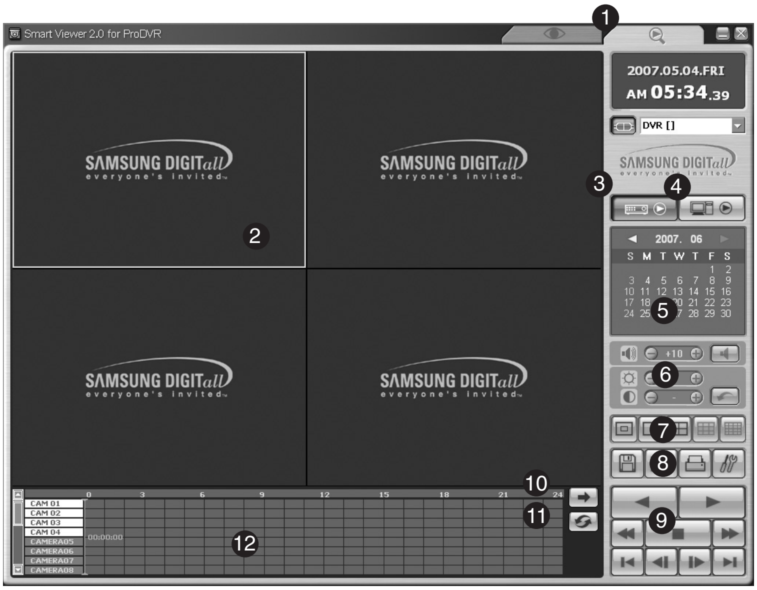
⚠ Caution

As far as SHR-2040/2041/2042 uses the PTZ camera control functions, Smart Viewer can not control PTZ Camera.
The PTZ Camera control functions can be used by the user with Admin authority.

8

Search Mode

- The initial screen of search mode
  - The search mode is divided into the remote mode to search and play the SHR-2040/2041/2042 video and the local mode to play *.dvr file saved in the directory designated by your PC.

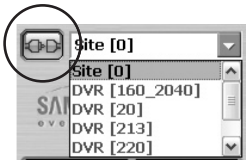

Smart Viewer 2.0 for ProDVR
2007.05.04.FRI
AM 05:34.39
DVR []
SAMSUNG DIGITall everyone's invited
2007. 06
S M T W T F S
+10
CAM 01
CAM 02
CAM 03
CAM 04
CAMERA05
CAMERA06
CAMERA07
CAMERA08
00:00:00
0 3 6 9 12 15 18 21 24
1
2
3
4
5
6
7
8
9
10
11
12

① To change to the search mode for the remote control of video recorded in SHR-2040/2041/2042.
② To show the playback video.
③ To change to the remote mode for the transmission of video recorded in SHR-2040/2041/2042 through network.
④ To change to the local mode for the playback of *.dvr files recorded in your PC.
⑤ Calendar window to select "Year/Month/Day" for search.
⑥ To control the audio volume and video brightness/contrast.
⑦ To change the screen split.
⑧ Button for the Record / Convert File / Print / Setup functions.
⑨ To control the playback of searched video.
⑩ To display the next channel in order.
⑪ To change the channel and DVR or renew the calendar window and Time Line.
⑫ Timeline to display the time information of search date recorded in SHR-2040/2041/2042.

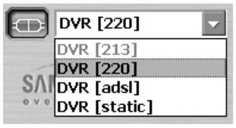
Note

- When connecting to the site, select a DVR to search in the camera connection list.
- When connecting as a user, you are denied to access the search mode.

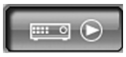
- DVR(SHR-2040/2041/2042) Selection/Change by contacting SITE
  - Same as “DVR(SHR-2040/2041/2042)/SITE Connection” of the monitoring mode.


Site [0]
Site [0]
DVR [160_2040]
DVR [20]
DVR [213]
DVR [220]

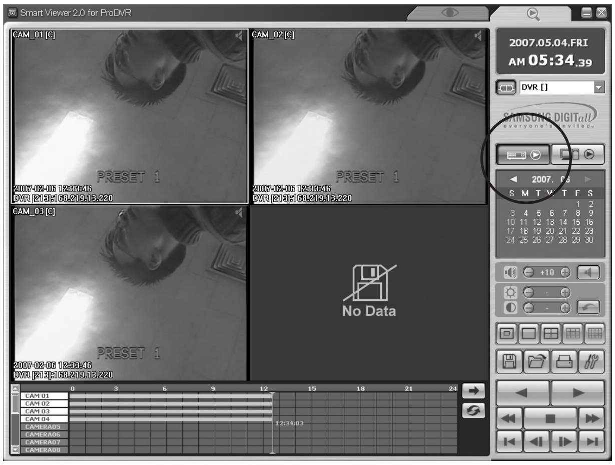
- DVR(SHR-2040/2041/2042) Selection/Change by contacting SITE
  - Select SHR-2040/2041/2042 from the Contact list.
  - SHR-2040/2041/2042 turns black if contacted with the ADMIN authority and turns gray if contacted with the USER authority.
  - Without the ADMIN authority, search is not accessible.


DVR [220]
DVR [213]
DVR [220]
DVR [adsl]
DVR [static]

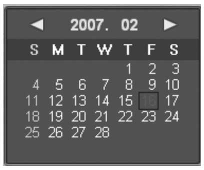
- Remote Mode
  - This mode transfers the video data recorded in SHR-2040/2041/2042 by network for the playback.
  - Up to 4 channels are allowed for simultaneous search and playback.
  - The video information at the time indicated by the timebar will be displayed in the playback screen.



When clicking, it changes to the remote mode.


Smart Viewer 2.0 for ProDVR
CAM_01 [C]
CAM_02 [C]
CAM_03 [C]
PRESET 1
No Data
2007.05.04.FRI
AM 05:34.39
DVR []
2007. 05
CAM 01
CAM 02
CAM 03
CAM 04
CAMERA05
CAMERA06
CAMERA07
CAMERA08

- Calendar Window

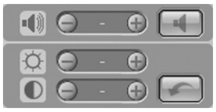


◄ 2007. 02 ►

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

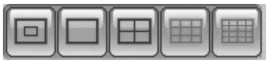
  - If the video data in on-line SHR-2040/2041/2042 is recorded, the date turns red.
  - If you click the date in red, the saved video information is displayed.
  - The currently selected date will be marked with a thick red box.
  - ◄ : Moves to the previous month.
  - ► : Moves to the next month.

- Audio Volume Control, Video Brightness/Contrast Control Buttons



  - Same as the control function of Monitoring Mode

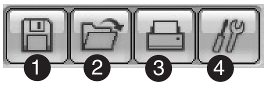
- Screen Split Selection Button
  - Full Screen / Single / Quad / Nine-split/ Sixteen split mode



Note

In the remote mode, Nine-split Mode is not available and in the local mode, Quad, Nine split Mode is not available.

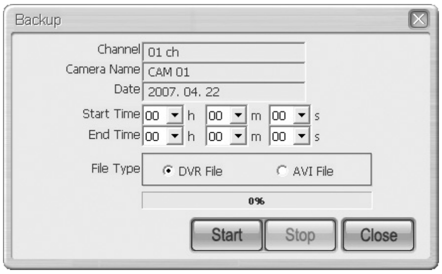
- Video Save(Backup) / Video Conversion / Print / Setup



① Video save button
:During the playback(Play/Reverse Play/Fast Forward/Fast Backward),
- If you select a channel in the playback and click the SAVE button, the video is saved in a file format with the extension of *.dvr in a designated folder of your PC.
- The directory in which an image will be saved, the file name, and the video length to be saved can be set at the Setup Mode → Viewer Setup.
- The video length to be saved can be set from one minute to 10 minutes.
- Click the button again to stop recording. However, manual suspension is prohibited for 10 seconds after recording started.

Backup Button

- If not playback(Stop), the video save button performs the backup function.



Channel 01 ch
Camera Name CAM 01
Date 2007. 04. 22
Start Time 00 h 00 m 00 s
End Time 00 h 00 m 00 s
File Type ● DVR File ○ AVI File
0%

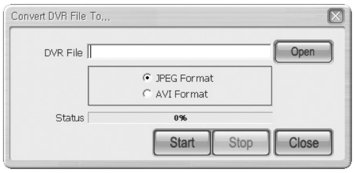
- If the save button is pressed, the window for backup pops up.
- Set a Start/End tome for backup and select a file format to save.
- The backup starts when the “Start” button is clicked. The backup file is saved according to the setting route; Setup → Viewer Setup → Video Recording → Video Location.
- To stop the backup, click the “Stop” button.

Note

Video saving in the remote mode is available only when the Play/Reverse Play/Fast Forward/Fast Backward button remains pressed down.
The backup function in the remote mode is available at the Stop status.
In the case of avi backup, you need the divx codec for playing saved files.
The divx codec can be found at www.divx.com.

② File Converting Button

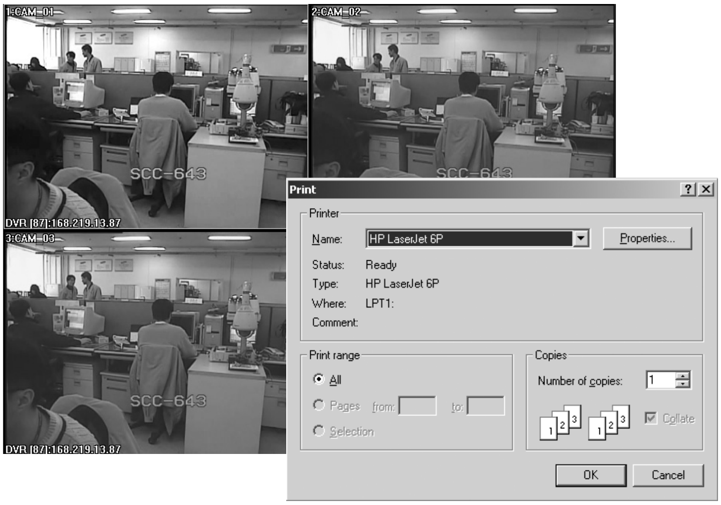
- This function converts *.dvr files into “*.jpg” files.



DVR File
● JPEG Format
○ AVI Format
Status 0%

- Click the “Open” button to select a *.dvr file to be converted.
- Select the JPEG Frame or AVI Video.
- If the JPEG Frame is selected, the file is converted into the “*.jpg” file by clicking the “Start” button. The converted “*.jpg” file is saved according to the setting route Setup → Viewer Setup → File Converting → Jpeg Location.
- I f the AVI Video is selected, the file is converted into the “*.avi” file by clicking the “Start” button. The converted “*.avi” file is saved according to the setting route Setup → Viewer Setup → File Converting → AVI Location
- Press the “Start” button to convert it to a *.Jpg file. Press Setup → Viewer Setup → File Converting to save the converted *.jpg file.
- Click the Stop button to pause the file conversion.

③ Print
- This function outputs the screen zone of the playback video which is now being displayed.



Print

Printer

Name: HP LaserJet 6P

Properties...

Status: Ready

Type: HP LaserJet 6P

Where: LPT1:

Comment:

Print range

● All

○ Pages from: to:

○ Selection

Copies

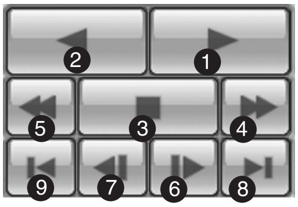
Number of copies: 1

☑ Collate

OK Cancel

④ Setup Mode Button
- This button pops up the setup mode window.

- Play Buttons

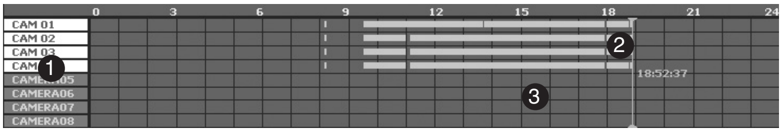


① Play : Play
② Reverse Play : Reverse Play
③ Stop : Stop
④ Fast Forward : Faster Play
⑤ Fast Backward : Faster Reverse Play
⑥ Step Forward : Forward playback per second.
⑦ Step Backward : Reverse playback per second.
⑧ Go to First : Playback of the first image in the time Line
⑨ Go to Last : Playback of the latest(last) image in the time Line

Note

During the play(Play/RevPlay/FF/FB), disconnection or change to the both monitoring mode and local mode is not permitted. Click the Stop button first before the change.

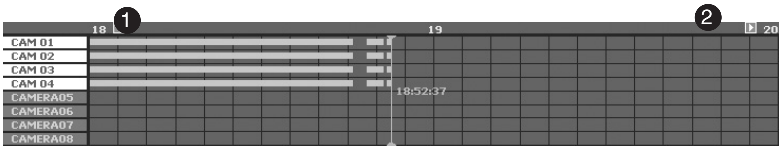
- Time Line
  - Displays the time information of video in SHR-2040/2041/2042 selected on the calendar window.
  - The normal mode indicates the time information of 24 hours while the Extension mode indicates the time information every 2 hours.


0
3
6
9
12
15
18
21
24
CAM 01
CAM 02
CAM 03
CAM
CAMERA05
CAMERA06
CAMERA07
CAMERA08
18:52:37
1
2
3

[Normal mode]
① The channels being displayed in the playback screen will be activated in the white background.
② Time Line : The time information of video recorded in SHR-2040/2041/2042.
③ Time Bar : Displays the current time of video being displayed in the playback screen.

Note

***Double click the area closed by the time bar to change to the zoom in mode.
One column of time line represents an hour.
Time Line turns Green(Normal), Red(Panic), Orange(Alarm), Blue(Motion), Yellow(Schedule), or Purple(Video Loss) depending on the recording condition.***


18
19
20
CAM 01
CAM 02
CAM 03
CAM 04
CAMERA05
CAMERA06
CAMERA07
CAMERA08
18:52:37
1
2

[Zoom In Mode]
① Displays the time line one hour ago.
② Displays the time line one hour later.

Note

***Double click again the area closed by the time bar to change to the normal mode.
One column of time line represents 5 minutes.
Time Line turns Green(Normal), Red(Panic), Orange(Alarm), Blue(Motion), Yellow(Schedule), or Purple(Video Loss) depending on the recording condition.***

- Next Button

  ➡

  - Changes the channel as the Next button does in the monitoring mode.

Note

During the video playback(Play/RevPlay/FF/FB), the channel change is not available.

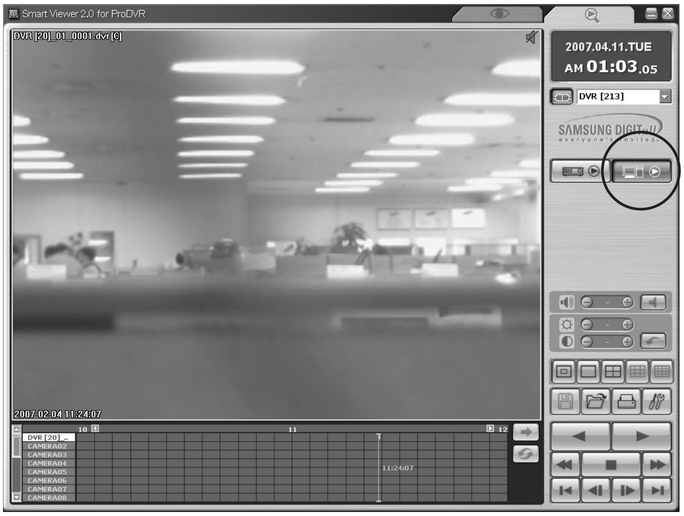
- Reload Button

  ⟳

  - Updates the record time information in the calendar window and time line.

- Local Mode
  - Plays *.dvr file saved in the directory of your PC by the Record function.
  - You can search and play only one channel.
  - You are allowed to access it regardless of connecting with SHR-2040/2041/2042.
  - Other functions than the calendar display function are as same as those of the remote mode.
  - The time information of LocalFile will be displayed at the first channel position in the time line together with the file name.

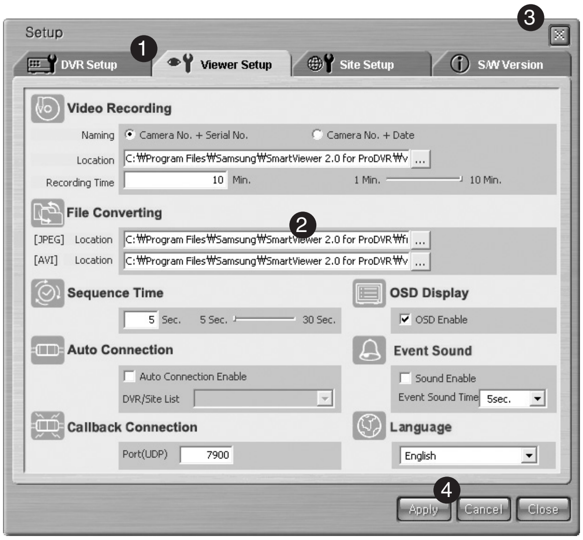
  : Selects a file to be played in the file selection window and changes to the local mode.


Smart Viewer 2.0 for ProDVR
DVR [20]_01_0001.dvr[C]
2007.04.11.TUE
AM 01:03.05
DVR [213]
SAMSUNG DIGITall
everyone's invited
2007-02-04 11:24:07
10
11
12
DVR [20] ..
CAMERA02
CAMERA03
CAMERA04
CAMERA05
CAMERA06
CAMERA07
CAMERA08
11:24:07

Note

Only the *.dvr file saved by the audio activation can be played in the local mode.

- Initial Screen



Video Recording

Naming ● Camera No. + Serial No. ○ Camera No. + Date

Location C:₩Program Files₩Samsung₩SmartViewer 2.0 for ProDVR₩v ...

Recording Time 10 Min. 1 Min. 10 Min.

File Converting

[JPEG] Location C:₩Program Files₩Samsung₩SmartViewer 2.0 for ProDVR₩fi ...

[AVI] Location C:₩Program Files₩Samsung₩SmartViewer 2.0 for ProDVR₩v ...

Sequence Time

5 Sec. 5 Sec. 30 Sec.

OSD Display

☑ OSD Enable

Auto Connection

☐ Auto Connection Enable

DVR/Site List

Event Sound

☐ Sound Enable

Event Sound Time 5sec.

Callback Connection

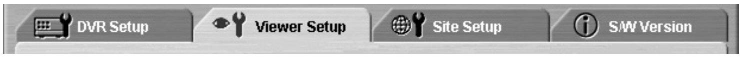
Port(UDP) 7900

Language

English

① Button to select items for DVR Setup, Viewer Setup, Site Setup, and S/W Version setup.
② It shows what the selected Setup item can set up in detail.
③ button to terminate the setup window.
④ Button to save the information revised in the setup window, remark the information prior to such a revision, or terminate the setup window.

- Setup Item Selection Button



- It is used for the selection of each setup item.
- It is composed of 4 items-DVR Setup, Viewer Setup, Site Setup, and S/W Version.
- DVR Setup : Allows you to change the remote menu setup items of SHR-2040/2041/2042.
- Viewer Setup : Allows you to set the various kinds of item concerning the operation of Smart Viewer.
- Site Setup : Allows you to set SHR-2040/2041/2042 information, that is SHR-2040/2041/2042 name, IP Address, ID, and Password that you are going to contact through Smart Viewer or registers all the registered SHR-2040/2041/2042s at a site for control.
- S/W Version : Shows the current version of Smart Viewer, system requirement, and the System S/W version of on-line SHR-2040/2041/2042 and upgrades SHR-2040/2041/2042 System S/W remotely.

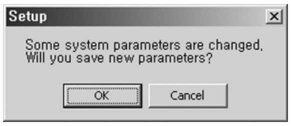
- Save/Cancellation of Revised Information

Apply
Cancel

- Click the [Apply] button to save the information revised in the setup window and click the [Cancel] button to display the information before such a revision.

- Closing the setup window

- Click the [X] icon on the top of right corner in the setup window or click the [Close] button to close the setup window.
- If more than one setup item have been revised before you close the setup window, the following message box pops up. If you press OK, the revised information will be saved, closing the setup window but if you press CANCEL, the revised information will be flown away, closing the Setup window.


Setup

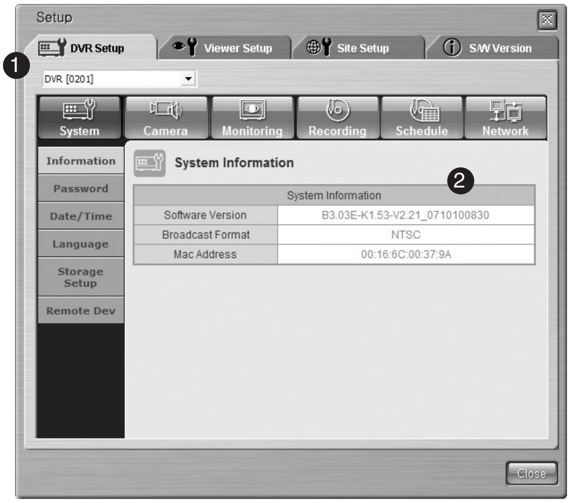
Some system parameters are changed.
Will you save new parameters?

DVR Setup

- Click the [DVR Setup] button for DVR Setup.
- You can change remotely the setup items of SHR-2040/2041/2042 Menu, being connected with Smart Viewer.
- DVR Setup is composed of 5 items; System, Camera/Audio, Monitoring, Recording, and Network.

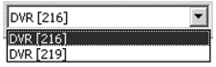
Note

- ***You are authorized with access to DVR Setup in an Admin authority only.***
- ***The button will not be activated if you are connected to SHR-2040/2041/2042 as a user or unconnected.***


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
1
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Information
Password
Date/Time
Language
Storage Setup
Remote Dev
System Information
2
Close

System Information	
Software Version	B3.03E-K1.53-V2.21_0710100830
Broadcast Format	NTSC
Mac Address	00:16:6C:00:37:9A

① Among more than one SHR-2040/2041/2042 that is connected now, the name of SHR-2040/2041/2042 connected in the Admin authority will be listed. Depending on connecting to a SHR-2040/2041/2042 or the site, the name of SHR-2040/2041/2042 or the name of SHR-2040/2041/2042 connected in the Admin. Authority among those composing the site will be listed. You can select one to set SHR-2040/2041/2042 Menu.


DVR [216]
DVR [216]
DVR [219]

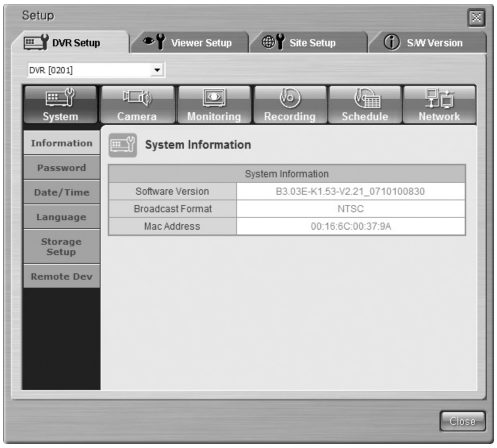
② To display the setup menu for selected SHR-2040/2041/2042.

- Detailed DVR Setup Items

  ① System

  - Information

    Information shows the information on on-line SHR-2040/2041/2042.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Information
Password
Date/Time
Language
Storage Setup
Remote Dev
Close

System Information

System Information	
Software Version	B3.03E-K1.53-V2.21_0710100830
Broadcast Format	NTSC
Mac Address	00:16:6C:00:37:9A

Note

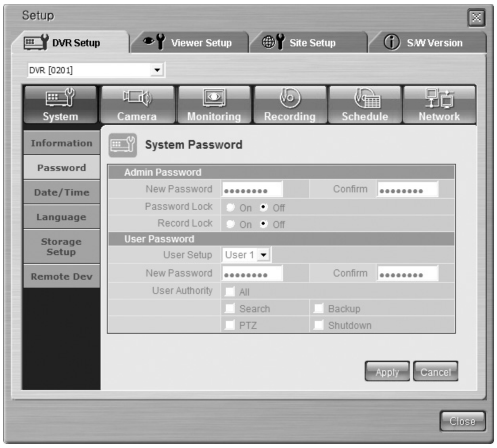
For the detailed items of DVR Setup, refer to Chapter 5.

- Admin Password

  You can change the Admin password related settings for control of DVR.

- User Password

  You can change the user password related settings for control of DVR.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Information
Password
Date/Time
Language
Storage Setup
Remote Dev
Apply
Cancel
Close

System Password

Admin Password

New Password •••••••• Confirm ••••••••

Password Lock ○ On ● Off

Record Lock ○ On ● Off

User Password

User Setup User 1

New Password •••••••• Confirm ••••••••

User Authority ☐ All

☐ Search ☐ Backup

☐ PTZ ☐ Shutdown

Caution

System Password shall be composed of numeric only, up to 8 digits.

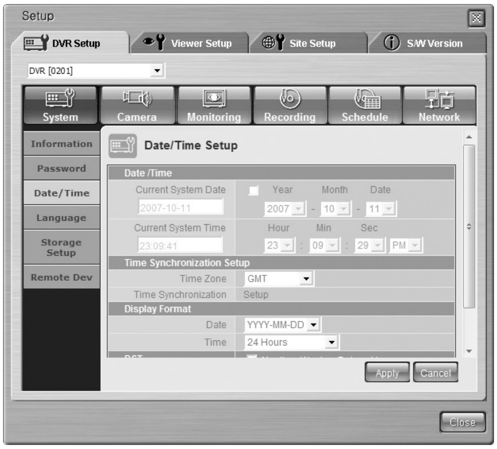
Note

- ***The Delete key and the combination of Ctrl+C or Ctrl+V in the keyboard are not supported at the System Password input.***
- ***Use the BACKSPACE key to delete the contents.***

Note

Default System Password is set to 4321.

- Date/Time
  Data/Time is used to set the information of Date, Time, Format, and DST for on-line SHR-2040/2041/2042.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
System
Camera
Monitoring
Recording
Schedule
Network
Information
Password
Date/Time
Language
Storage Setup
Remote Dev
Apply
Cancel
Close

DVR [0201]

Date/Time Setup

Date /Time

Current System Date: 2007-10-11 ☐ Year 2007 - Month 10 - Date 11

Current System Time: 23:09:41 Hour 23 : Min 09 : Sec 29 PM

Time Synchronization Setup

Time Zone: GMT

Time Synchronization: Setup

Display Format

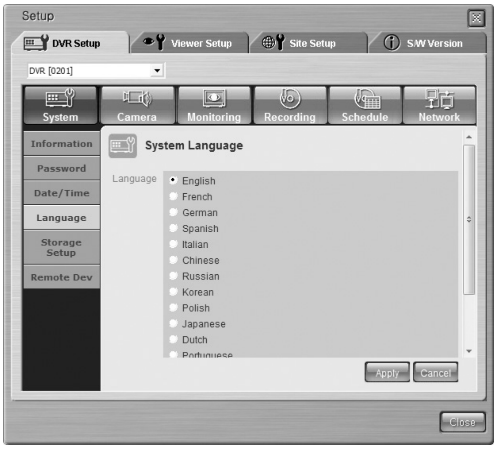
Date: YYYY-MM-DD

Time: 24 Hours

Note

- ***If you change the Data/Time value, SHR-2040/2041/2042 automatically cuts the connection with Smart Viewer to apply the new time setup.***
- ***Upon completing the new time setup for SHR-2040/2041/2042, you are permitted to resume the connection with the Smart Viewer.***
- ***But, Display Format or DST can be set without the disconnection.***

- Language
  Language sets the language in which on-line SHR-2040/2041/2042 will be expressed


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Information
Password
Date/Time
Language
Storage Setup
Remote Dev
Apply
Cancel
Close

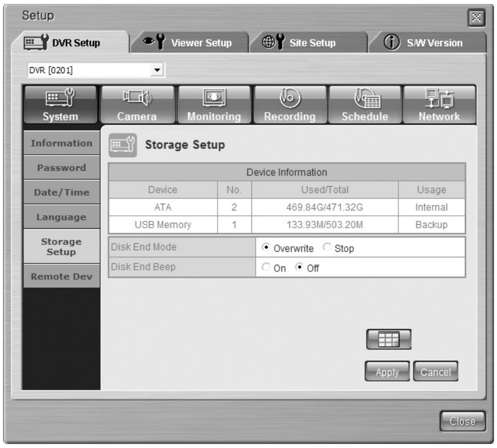
System Language

Language
● English
○ French
○ German
○ Spanish
○ Italian
○ Chinese
○ Russian
○ Korean
○ Polish
○ Japanese
○ Dutch
○ Portuguese

Note

The change of language by the system language results in the change of language expression setup of SHR-2040/2041/2042. In short, the language setup of Smart Viewer does not change.
Language specification to be supported is subject to change later.

- Storage Setup
  It displays the information of the HDD that is contained in your DVR.

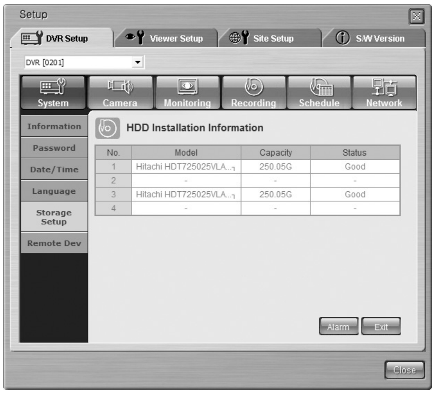

Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Information
Password
Date/Time
Language
Storage Setup
Remote Dev
Apply
Cancel
Close

Storage Setup

Device Information

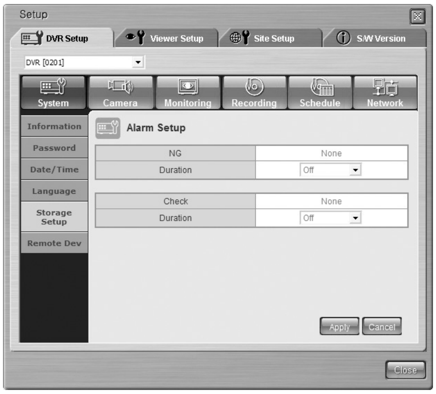
Device	No.	Used/Total	Usage
ATA	2	469.84G/471.32G	Internal
USB Memory	1	133.93M/503.20M	Backup

Disk End Mode	● Overwrite ○ Stop
Disk End Beep	○ On ● Off


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Information
Password
Date/Time
Language
Storage Setup
Remote Dev
Alarm
Exit
Close

HDD Installation Information

No.	Model	Capacity	Status
1	Hitachi HDT725025VLA...	250.05G	Good
2	-	-	-
3	Hitachi HDT725025VLA...	250.05G	Good
4	-	-	-

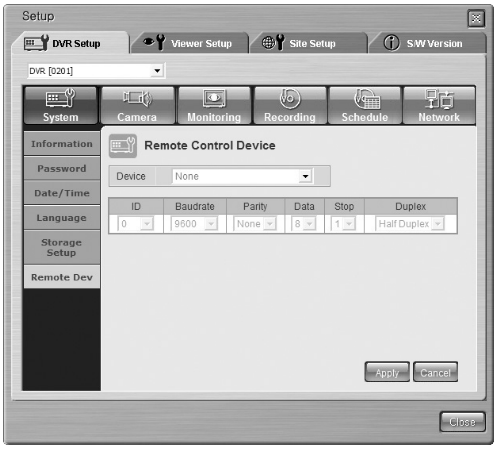

Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Information
Password
Date/Time
Language
Storage Setup
Remote Dev
Apply
Cancel
Close

Alarm Setup

NG	None
Duration	Off

Check	None
Duration	Off

- Remocon (Remote Control Device)
  Remocon can set the remote control device installed to SHR-2040/2041/2042.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Information
Password
Date/Time
Language
Storage Setup
Remote Dev
Apply
Cancel
Close

Remote Control Device

Device: None

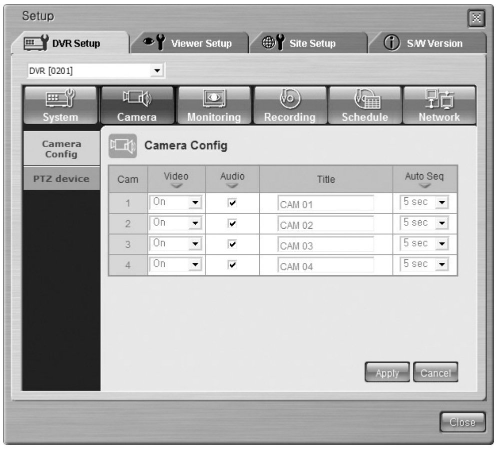
ID	Baudrate	Parity	Data	Stop	Duplex
0	9600	None	8	1	Half Duplex

Note

If you install the remote control device to the main body of SHR-2040/2041/2042 and activate the setup, PTZ control is not available in the Viewer.

② Camera
- Config.

  Config. sets Video, Audio On/Off, Camera Title, and Auto Sequence Time for each channel of on-line SHR-2040/2041/2042.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
System
Camera
Monitoring
Recording
Schedule
Network
Camera Config
PTZ device
Apply
Cancel
Close

DVR [0201]

Camera Config

Cam	Video	Audio	Title	Auto Seq
1	On	☑	CAM 01	5 sec
2	On	☑	CAM 02	5 sec
3	On	☑	CAM 03	5 sec
4	On	☑	CAM 04	5 sec

Caution

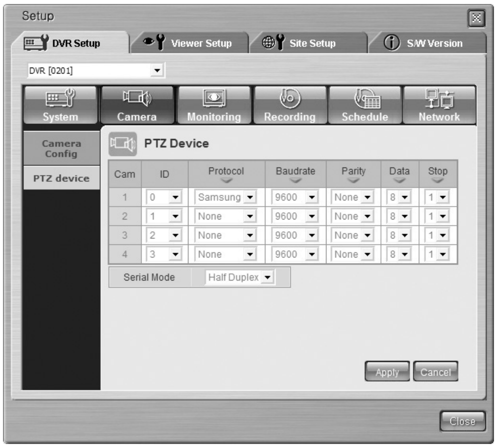
- *Only English is supported for the title. If you type in and apply the title in your native language, warning message pop sup to ask your retyping.*
- *The title should be composed of no more than 15 digits.*
- *If you leave the title blank and apply it, Warning message pops up to ask your retyping.*

Note

- *The Delete key and the combination of Ctrl+C or Ctrl+V in the keyboard are not supported for title input.*
- *Use the BACKSPACE key to delete the contents.*

- PTZ device

  It sets Camera ID, Protocol, Baud Rate, Parity, Data Bit, Stop Bit, and Serial Mode when connecting the dome camera to all the channels.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Camera Config
PTZ device
Apply
Cancel
Close

PTZ Device

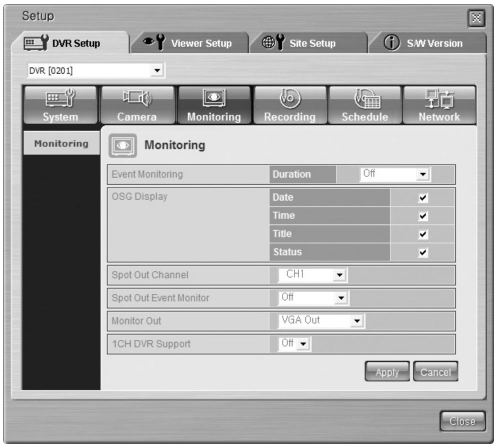
Cam	ID	Protocol	Baudrate	Parity	Data	Stop
1	0	Samsung	9600	None	8	1
2	1	None	9600	None	8	1
3	2	None	9600	None	8	1
4	3	None	9600	None	8	1

Serial Mode: Half Duplex

③ Monitoring

- Monitoring

  It sets both the event monitoring and OSG display of the live mode.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Monitoring
Apply
Cancel
Close

Monitoring

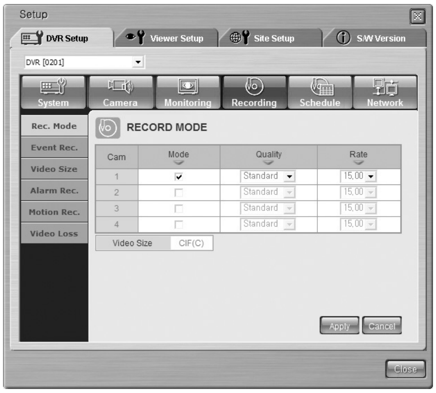
Event Monitoring	Duration	Off
OSG Display	Date	☑
	Time	☑
	Title	☑
	Status	☑
Spot Out Channel	CH1	
Spot Out Event Monitor	Off	
Monitor Out	VGA Out	
1CH DVR Support	Off	

④ Recording

- Rec. Mode

  It sets the Video Size, Quality, and Rate values during the recording by the setting the recoding ON/OFF for the related channel in the live mode.

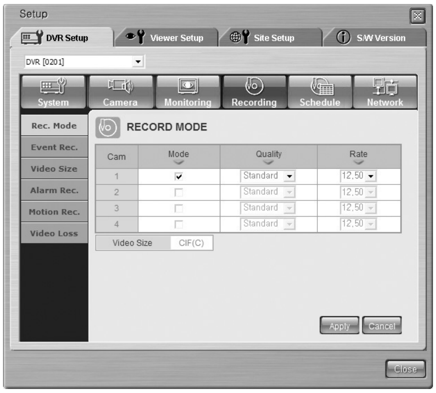
NTSC


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Rec. Mode
Event Rec.
Video Size
Alarm Rec.
Motion Rec.
Video Loss
RECORD MODE
Apply
Cancel
Close

Cam	Mode	Quality	Rate
1	☑	Standard	15.00
2	☐	Standard	15.00
3	☐	Standard	15.00
4	☐	Standard	15.00

Video Size: CIF(C)

PAL


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Rec. Mode
Event Rec.
Video Size
Alarm Rec.
Motion Rec.
Video Loss
RECORD MODE
Apply
Cancel
Close

Cam	Mode	Quality	Rate
1	☑	Standard	12.50
2	☐	Standard	12.50
3	☐	Standard	12.50
4	☐	Standard	12.50

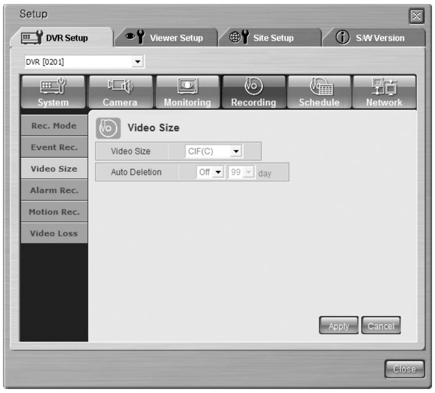
Video Size: CIF(C)

Note

Full D1(L) Video Size does not support 15.00ips, 10.00ips (NTSC) / 12.50ips, and 8.33ips(PAL) Rate.

- Video size Rec.

  Sets the Video size. The Video size being set in the menu affects to the ips setup of Rec. Mode and Event Rec.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Rec. Mode
Event Rec.
Video Size
Alarm Rec.
Motion Rec.
Video Loss
Video Size
Apply
Cancel
Close

Video Size: CIF(C)

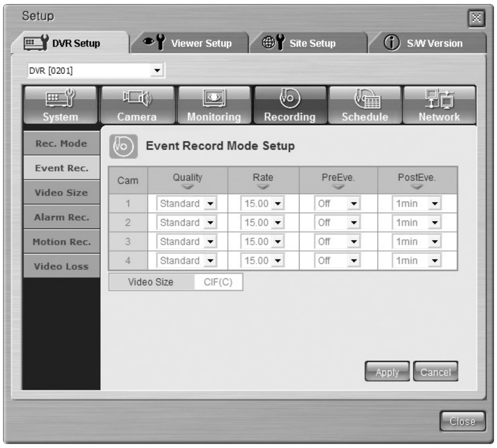
Auto Deletion: Off 99 day

Note

Full D1(L) Video Size does not support 15.00ips, 10.00ips (NTSC) / 12.50ips, and 8.33ips(PAL) Rate.

- Event Rec.
  It sets the Video Size, Quality, Rate, Pre Alarm, and Post Alarm values to be recorded when an event occurs.

NTSC



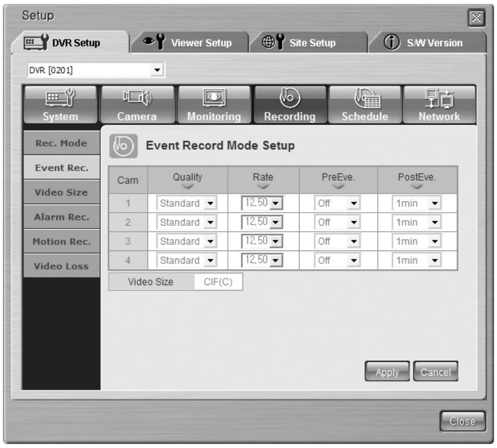
Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Rec. Mode
Event Rec.
Video Size
Alarm Rec.
Motion Rec.
Video Loss
Apply
Cancel
Close

Event Record Mode Setup

Cam	Quality	Rate	PreEve.	PostEve.
1	Standard	15.00	Off	1min
2	Standard	15.00	Off	1min
3	Standard	15.00	Off	1min
4	Standard	15.00	Off	1min

Video Size CIF(C)

PAL



Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Rec. Mode
Event Rec.
Video Size
Alarm Rec.
Motion Rec.
Video Loss
Apply
Cancel
Close

Event Record Mode Setup

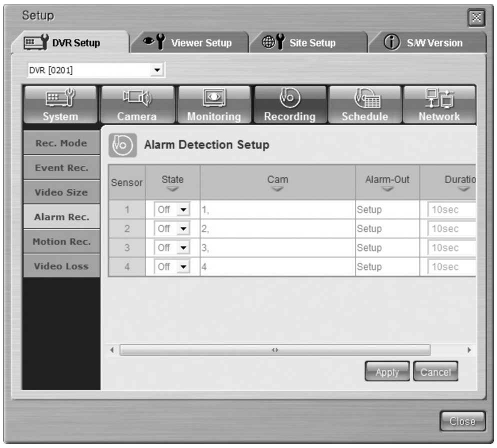
Cam	Quality	Rate	PreEve.	PostEve.
1	Standard	12.50	Off	1min
2	Standard	12.50	Off	1min
3	Standard	12.50	Off	1min
4	Standard	12.50	Off	1min

Video Size CIF(C)

Note

Full D1(L) Video Size does not support 15.00ips, 10.00ips(NTSC) / 12.50ips, and 8.33ips(PAL) Rate.

- Alarm Rec.
  It sets the information necessary for the alarm recording.

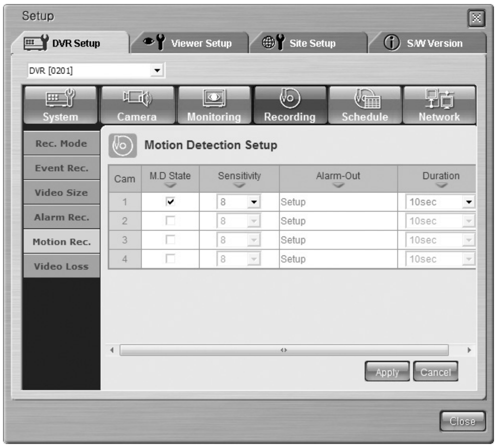

Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Rec. Mode
Event Rec.
Video Size
Alarm Rec.
Motion Rec.
Video Loss
Alarm Detection Setup
Apply
Cancel
Close

Sensor	State	Cam	Alarm-Out	Duratio
1	Off	1,	Setup	10sec
2	Off	2,	Setup	10sec
3	Off	3,	Setup	10sec
4	Off	4	Setup	10sec

Note

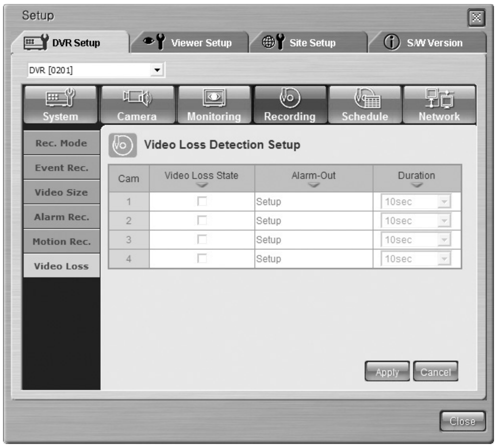
More than one camera should be selected to apply the alarm.

- Motion Rec.
  It sets the information necessary for the recording by the motion Detection.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Rec. Mode
Event Rec.
Video Size
Alarm Rec.
Motion Rec.
Video Loss
Motion Detection Setup
Apply
Cancel
Close

Cam	M.D State	Sensitivity	Alarm-Out	Duration
1	☑	8	Setup	10sec
2	☐	8	Setup	10sec
3	☐	8	Setup	10sec
4	☐	8	Setup	10sec

- Video Loss
  Video Loss sets up the information on how to inform the user of Video Loss of SHR-2040/2041/2042.

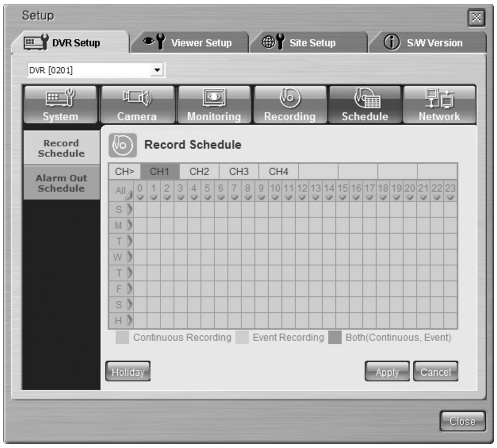

Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Rec. Mode
Event Rec.
Video Size
Alarm Rec.
Motion Rec.
Video Loss
Apply
Cancel
Close

Video Loss Detection Setup

Cam	Video Loss State	Alarm-Out	Duration
1	☐	Setup	10sec
2	☐	Setup	10sec
3	☐	Setup	10sec
4	☐	Setup	10sec

⑤ Schedule
  You can configure schedule-related settings.

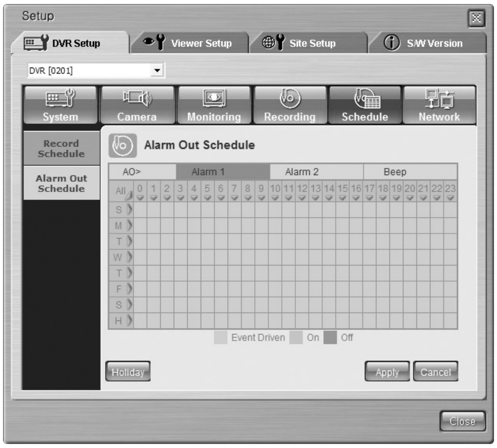
- Record Schedule
  You can change the schedule recordingrelated settings.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Record Schedule
Alarm Out Schedule
CH>
CH1
CH2
CH3
CH4
All
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
S
M
T
W
T
F
S
H
Holiday
Apply
Cancel
Close

Record Schedule

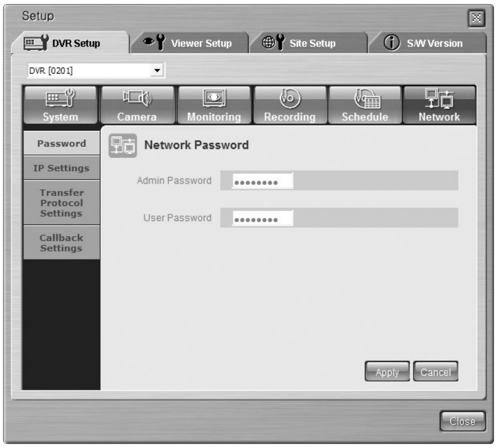
Continuous Recording
Event Recording
Both(Continuous, Event)

- Alarm Out Schedule
  You can change the alarming schedulerelated settings.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Record Schedule
Alarm Out Schedule
Alarm Out Schedule
AO>
Alarm 1
Alarm 2
Beep
All
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
S
M
T
W
T
F
S
H
Event Driven
On
Off
Holiday
Apply
Cancel
Close

⑥ Network
- Password
  It sets the password for Admin and User when connecting with SHR-2040/2041/2042 through the network in Smart Viewer.

- Double-click the Smart Viewer icon in the background screen to run the program.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Password
IP Settings
Transfer Protocol Settings
Callback Settings
Network Password
Apply
Cancel
Close

Admin Password ••••••••

User Password ••••••••

⚠ *Caution*

- ***Network password should be composed of numeric and it can be input up to 8 digits.***
- ***If you leave password blank and apply it, a warning message pops up to ask your retyping.***

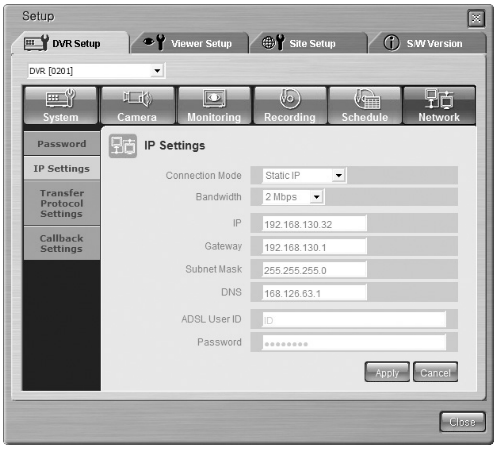
Note

- ***The Delete key and the combination of Ctrl+C or Ctrl+V in the keyboard are not supported to the network password input.***
- ***Use the BACKSPACE key to delete the contents.***

Note

- ***Default Admin Password is set to 4321.***
- ***Default User Password is set to 4321.***

- IP Settings
  It sets the network connection method of SHR-2040/2041/2042. SHR-2040/2041/2042 supports the connection with Static IP, Dynamic IP, and ADSL(PPPoE). It can set the network bandwidth. Adjust the bandwidth to the network condition in which SHR-2040/2041/2042 is connected.
  It sets the IP Address, Gateway, Subnet Mask, and DNS. Input both ID and password of the sub scriber for ADSL.

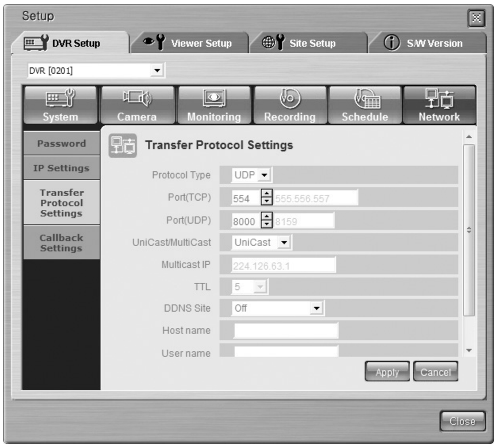

Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
DVR [0201]
System
Camera
Monitoring
Recording
Schedule
Network
Password
IP Settings
Transfer Protocol Settings
Callback Settings
IP Settings
Apply
Cancel
Close

Connection Mode: Static IP
Bandwidth: 2 Mbps
IP: 192.168.130.32
Gateway: 192.168.130.1
Subnet Mask: 255.255.255.0
DNS: 168.126.63.1
ADSL User ID: ID
Password: ●●●●●●●●

Caution

- *Be sure to inquire the network manager before you input Network IP, Gateway, Subnet Mask, and DNS.*
- *Both ADSL ID and Password can be input up to 40 digits of alphabets, numbers, and symbols without discrimination.*

- Transfer Protocol
  - You can change the transfer protocol setting value. The protocol supports TCP/IP and UDP(Unicast, Multicast). Control Port(TCP/IP) and Port(UDP) to alter the connection port. Both Multicast IP and TTL are used for UDP(Multicast).

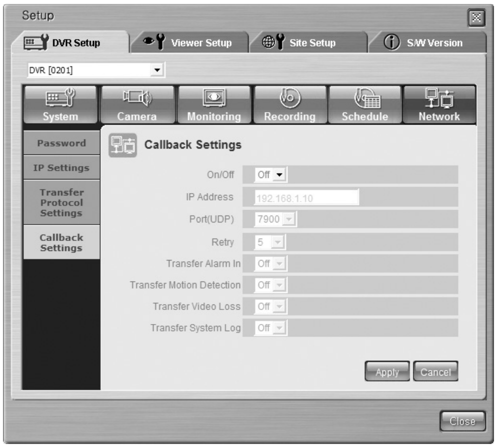

Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
System
Camera
Monitoring
Recording
Schedule
Network
Password
IP Settings
Transfer Protocol Settings
Callback Settings
Apply
Cancel
Close

DVR [0201]

Transfer Protocol Settings

Protocol Type: UDP
Port(TCP): 554 555.556.557
Port(UDP): 8000 8159
UniCast/MultiCast: UniCast
Multicast IP: 224.126.63.1
TTL: 5
DDNS Site: Off
Host name:
User name:

- Callback
  - You can set the Callback function of SHR-2040/2041/2042.
  - In the event of Alarm, Motion Detection, or Video Loss, set the IP address and port of PC where SmartViewer is installed to forward Callback messages. In failure of message forwarding, set the value for retrial.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
System
Camera
Monitoring
Recording
Schedule
Network
Password
IP Settings
Transfer Protocol Settings
Callback Settings
Apply
Cancel
Close

DVR [0201]

Callback Settings

On/Off: Off
IP Address: 192.168.1.10
Port(UDP): 7900
Retry: 5
Transfer Alarm In: Off
Transfer Motion Detection: Off
Transfer Video Loss: Off
Transfer System Log: Off

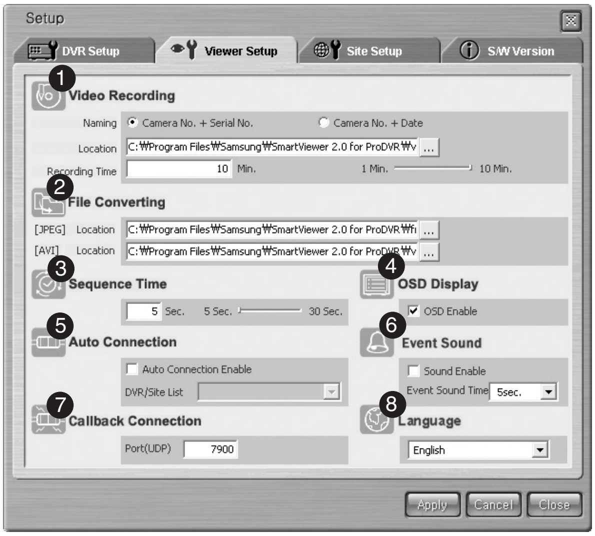
Note

- ***SHR-2040/2041/2042 uses 4 ports for TCP connection.***
- ***The PORT number is flexible and 4 consecutive numbers are grouped for the change (554,555,556,557 → 558,559,560,561)***
- ***If you use the IP Router for network composition, you should allocate a protocol for SHR-2040/2041/2042.***

Viewer Setup

Viewer Setup

- Click the [Viewer Setup] for Viewer Setup.
- Viewer Setup sets the various kinds of item related to the operation of Smart Viewer.
- Viewer setup is composed of Video Recording, File Converting, Sequence Time, OSD Display, Auto Connection, Callback Connection, and Language.

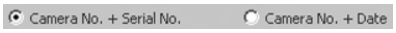

Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
1
Video Recording
2
File Converting
3
Sequence Time
4
OSD Display
5
Auto Connection
6
Event Sound
7
Callback Connection
8
Language
Apply
Cancel
Close

Naming ● Camera No. + Serial No. ○ Camera No. + Date
Location C:₩Program Files₩Samsung₩SmartViewer 2.0 for ProDVR₩v
Recording Time 10 Min. 1 Min. 10 Min.
[JPEG] Location C:₩Program Files₩Samsung₩SmartViewer 2.0 for ProDVR₩fi
[AVI] Location C:₩Program Files₩Samsung₩SmartViewer 2.0 for ProDVR₩v
5 Sec. 5 Sec. 30 Sec.
☑ OSD Enable
☐ Auto Connection Enable
DVR/Site List
☐ Sound Enable
Event Sound Time 5sec.
Port(UDP) 7900
English

① Item to set the information necessary for saving the video data displayed into *.dvr file when connecting with SHR-2040/2041/2042.
② Item to set the information necessary for converting the file saved in your PC with *.dvr file into JPEG.
③ Item to set the information necessary for the auto sequence mode.
④ Item to set the information of Smart Viewer OSD.
⑤ Item to set whether Smart Viewer shall be automatically connected to DVR(SHR-2040/2041/2042) or Site when it begins running.
⑥ This is a menu item that is designed to set the alarming time when it receives an event message such as an alarm, motion and / or Video loss.
⑦ Item to set a port for the callback connection.
⑧ This item is for the language setup.

- Video Recording

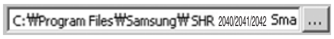
① Naming



◉ Camera No. + Serial No. ○ Camera No. + Date

- Being connected to SHR-2040/2041/2042 in the monitoring or search mode, you can save the video displayed with *.dvr file and name it.
- If you set to “Camera No. + Serial No.”, the file name depends on the camera number and serial number. If set to “Camera No. + Date”, it depends on the camera number, current date, and time.

② Location



C:₩Program Files₩Samsung₩SHR 2040/2041/2042 Sma

- When connecting with SHR-2040/2041/2042 in the monitoring or search mode and saving the video displayed, it sets the directory where *.dvr file to be saved.
- The current default directory is “Directory that installs Smart Viewer Program \ video \ dvr”.

③ Recording Time

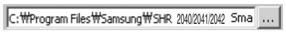
1 Min.

- When connecting with SHR-2040/2041/2042 in the monitoring or search mode and saving the video displayed, it sets the maximum saving time.
- The saving time can be set from 1 to 10 minutes. If the saving time exceeds the preset time, the saving stops automatically.

- File Converting

[JPEG]

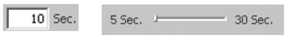
① Location



C:₩Program Files₩Samsung₩SHR 2040/2041/2042 Sma

- You can convert the file saved in your PC with *.dvr format into JPEG file. The frames composing *.dvr file will be converted into JPEG file. Sets the directory in which the converted JPEG file will be saved.
- The current default directory is “Directory that installs Smart Viewer Program \ frame”.

- Sequence Time



10 Sec.

- When connecting with SHR-2040/2041/2042 in the monitoring mode, set the auto sequence time if the auto sequence is set. The time can be set from 10 to 20 minutes.

- OSD Display

☑ OSD Enable

- Sets if OSD shall be displayed on each channel of Smart Viewer.
- Whether you check "Enable" or not, OSD will appear or not.
  However, Audio icon, PTZ icon, REC icon, and Alarm/Motion event icon will not be affected by the OSD condition.

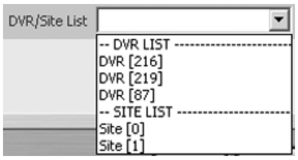
- Callback Connection

Port(UDP) 7900

- Sets the port for Callback connection.

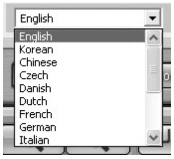
- Auto Connection
- Sets if the smart viewer is automatically connected to SHR-2040/2041/2042 or site at the initial operation.
- If you check "Auto Connection Enable", the names of SHR-2040/2041/2042 and Site currently registered at the DVR/Site list will be displayed in the following list. If you select one from the list, the smart viewer will connect to the selected SHR-2040/2041/2042 or Site when it operates later.

☑ Auto Connection Enable



DVR/Site List
-- DVR LIST --------------------
DVR [216]
DVR [219]
DVR [87]
-- SITE LIST --------------------
Site [0]
Site [1]

- Language

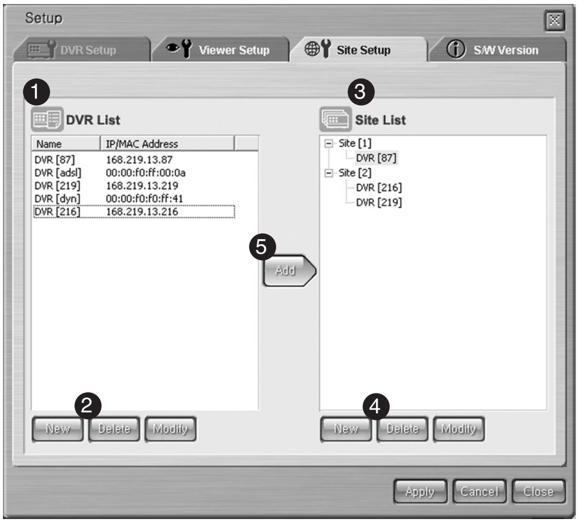


English
English
Korean
Chinese
Czech
Danish
Dutch
French
German
Italian

- Sets the language used in the SmartViewer.

Site Setup

- Click the [Site Setup] button for Site Setup.
- The information of DVR(SHR-2040/2041/2042) or Site that you want to connect by Smart Viewer is set in the Site Setup.
- Smart Viewer allows you to connect with DVR(SHR-2040/2041/2042) or Site registered only here.

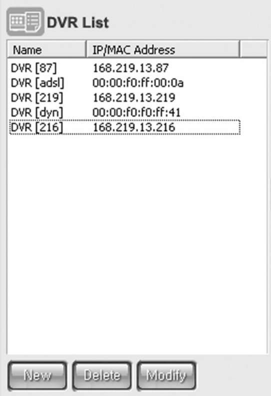

Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
1
DVR List
3
Site List
5
Add
2
New
Delete
Modify
4
New
Delete
Modify
Apply
Cancel
Close

Name	IP/MAC Address
DVR [87]	168.219.13.87
DVR [adsl]	00:00:f0:ff:00:0a
DVR [219]	168.219.13.219
DVR [dyn]	00:00:f0:f0:ff:41
DVR [216]	168.219.13.216

- Site [1]
  - DVR [87]
- Site [2]
  - DVR [216]
  - DVR [219]

① The DVR(SHR-2040/2041/2042) list that registered by the user is displayed.
② The button to add a new DVR(SHR-2040/2041/2042), delete, or edit the exist DVR(SHR-2040/2041/2042)
③ The site list that registered by the user is displayed.
④ The button to add a new site, delete, edit the exist site, or delete DVR(SHR-2040/2041/2042) that composes the site.
⑤ The button to add DVR(SHR-2040/2041/2042) selected from the DVR list to the Site selected from the Site list.

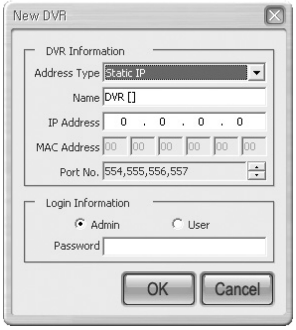
- DVR List



Name	IP/MAC Address
DVR [87]	168.219.13.87
DVR [adsl]	00:00:f0:ff:00:0a
DVR [219]	168.219.13.219
DVR [dyn]	00:00:f0:f0:ff:41
DVR [216]	168.219.13.216

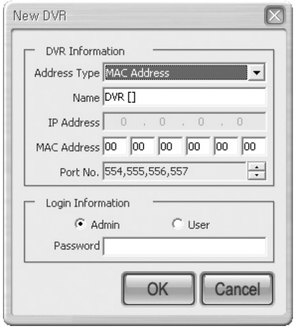
- The information of DVR(SHR-2040/2041/2042) that you want to connect by Smart Viewer is set in the DVR List.
- You can register a new DVR(SHR-2040/2041/2042) or delete and edit the DVR(SHR-2040/2041/2042) selected from the registered list, and the name and IP / MAC Address of the registered DVR(SHR-2040/2041/2042) is displayed in DVR List.

- If your DVR (SHR-2040/2041/2042) uses a static IP, select “Static IP” for Address Type and type in the name of the DVR (SHR-2040/2041/2042) and the IP address.
- Select “Port” so that it matches the port number that you’ve set in the network menu of DVR (SHR-2040/2041/2042).


New DVR
DVR Information
Login Information
OK
Cancel

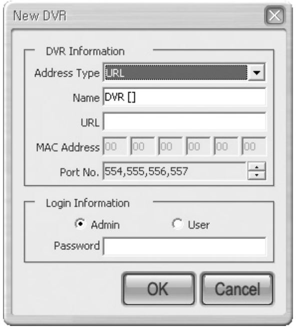
Address Type: Static IP
Name: DVR []
IP Address: 0 . 0 . 0 . 0
MAC Address: 00 00 00 00 00 00
Port No.: 554,555,556,557
● Admin ○ User
Password:

- If your DVR (SHR-2040/2041/2042) uses a dynamic IP such as in a cable modem or VDSL, or PPPoE for ADSL, select “MAC Address” for Address Type and type in the MAC address of the DVR (SHR-2040/2041/2042).
- Select “Port” so that it matches the port number that you’ve set in the network menu of DVR (SHR-2040/2041/2042).


New DVR
DVR Information
Login Information
OK
Cancel

Address Type: MAC Address
Name: DVR []
IP Address: 0 . 0 . 0 . 0
MAC Address: 00 00 00 00 00 00
Port No.: 554,555,556,557
● Admin ○ User
Password:

- If you select “Use DDNS” in the network settings menu of DVR (SHR-2040/2041/2042) or use an IP splitter to register an URL using DDNS, you can make connection via the URL.
- If you want to make connection via the an URL, select “URL” for Address Type and type in the URL set for the DVR or IP splitter in the URL menu item.
- Select “Port” so that it matches the port number that you've set in the network menu of DVR (SHR-2040/2041/2042).



New DVR

DVR Information

Address Type: URL

Name: DVR []

URL:

MAC Address: 00 00 00 00 00 00

Port No.: 554,555,556,557

Login Information

● Admin ○ User

Password:

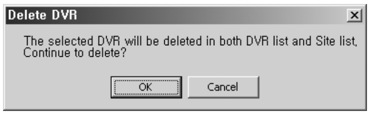
Note

- ***The MAC address of DVR is written at the side label of the product. It is also found in the system information of DVR Menu.***
- ***If the DVR(SHR-2040/2041/2042) is connected to ADSL, the network bandwidth is low. Therefore, the transfer rate becomes low and the viewer operates in the more limited range.***
- ***The viewer can monitor up to 4CH all the same time.***
- ***The viewer can search or play only 1CH.***
- ***The audio does not play.***
- ***The number of playback frame is 0.5 ips in average, but it is variable depending on the number of channel and video size under simultaneous monitoring.***

② Deletion of an old DVR(SHR-2040/2041/2042)

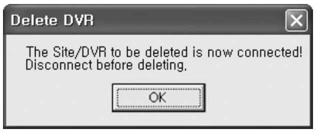
Delete

- If you select a DVR(SHR-2040/2041/2042) in the DVR list for deletion and press the [Delete] button, the following message box pops up. Press the [OK] button to delete the DVR(SHR-2040/2041/2042).



The selected DVR will be deleted in both DVR list and Site list.
Continue to delete?

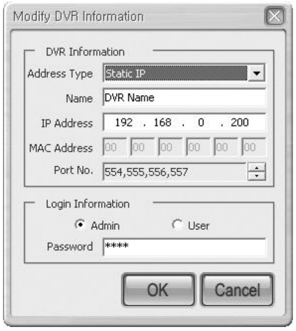
- When the DVR(SHR-2040/2041/2042) for deletion is connected with the Smart Viewer, the following message box pops up and the DVR(SHR-2040/2041/2042) cannot be deleted. Be sure to cut the connection between the DVR(SHR-2040/2041/2042) and the Smart Viewer before you delete it.



The Site/DVR to be deleted is now connected!
Disconnect before deleting.

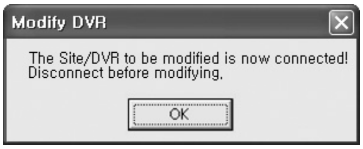
③ To Edit the old DVR(SHR-2040/2041/2042)

- If you select a DVR(SHR-2040/2041/2042) in the DVR list to edit and press the [Edit] button, the following message box pops up. Press [OK] button to edit the DVR(SHR-2040/2041/2042).


Modify DVR Information
DVR Information
Login Information
OK
Cancel

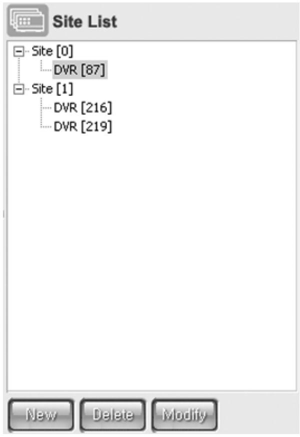
Address Type: Static IP
Name: DVR Name
IP Address: 192 . 168 . 0 . 200
MAC Address: 00 00 00 00 00 00
Port No.: 554,555,556,557
● Admin ○ User
Password: ****

- When the DVR(SHR-2040/2041/2042) to edit is connected with the Smart Viewer, the following message box pops up and the DVR(SHR-2040/2041/2042) cannot be edited. Be sure to cut the connection between the DVR(SHR-2040/2041/2042) and the Smart Viewer before you edit it.


Modify DVR
OK

The Site/DVR to be modified is now connected!
Disconnect before modifying.

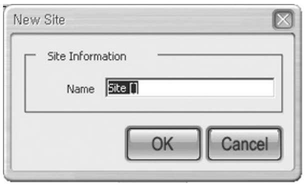
- Site List


Site List
Site [0]
DVR [87]
Site [1]
DVR [216]
DVR [219]
New
Delete
Modify

- You can register and control the many DVRS(SHR-2040/2041/2042) to be connected with the smart viewer at once with a site in the site list. You are allowed to register a new site, and delete or edit the selected site in the registered list. Also, you can add or delete a DVRS(SHR-2040/2041/2042) to the site selected in the site list.
- In the site list, both the name of a registered site and the name of DVRS(SHR-2040/2041/2042) that composes the site are displayed with a list. You can also set up up to 16 DVRS(SHR-2040/2041/2042) for one site.

① New site addition

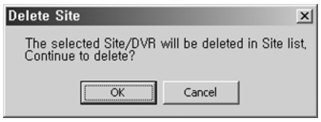
- If you press the [New] button, the following window pops up and you can allowed to input the information for a new site.
- The information to be input is the site name.


New Site
Site Information
Name
OK
Cancel

② To delete an old site or DVR(SHR-2040/2041/2042)

Delete

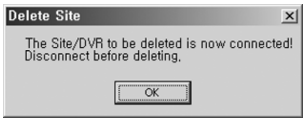
- If you select a site or DVR(SHR-2040/2041/2042) in the site list for deletion and press the [Delete] button, the following message box pops up.
  Press the [OK] button to delete either site or DVR(SHR-2040/2041/2042).
- When deleting the DVR(SHR-2040/2041/2042), it is deleted from the site composition but the DVR(SHR-2040/2041/2042) information is not deleted.



Delete Site

The selected Site/DVR will be deleted in Site list, Continue to delete?

- When the site to delete or the site that is composed of the DVR (SHR-2040/2041/2042) to delete is connected with the Smart Viewer, the following message box pops up and the site or the DVR (SHR-2040/2041/2042) cannot be deleted. Be sure to cut the connection between the DVR (SHR-2040/2041/2042) and the Smart Viewer before you delete it.



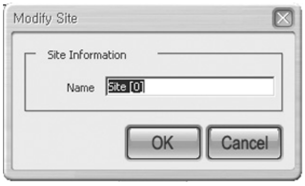
Delete Site

The Site/DVR to be deleted is now connected! Disconnect before deleting.

③ To edit the information of an old site

Modify

- If you select a site in the site list to edit and press the [Edit] button, the following message box pops up and you can edit the site information.

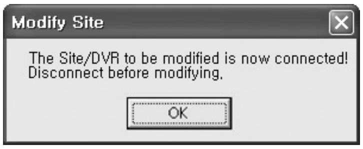


Modify Site

Site Information

Name: Site [0]

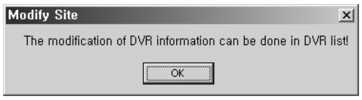
- When the site to edit is connected with the Smart Viewer, the following message box pops up and the site cannot be edited. Be sure to cut the connection between the DVR(SHR-2040/2041/2042) and the Smart Viewer before you edit it.



Modify Site

The Site/DVR to be modified is now connected!
Disconnect before modifying.

- If you select a DVR(SHR-2040/2041/2042) and press the [Edit] button, the following message box pops up and the DVR(SHR-2040/2041/2042) cannot be edited. To edit the DVR(SHR-2040/2041/2042), go to the DVR list.

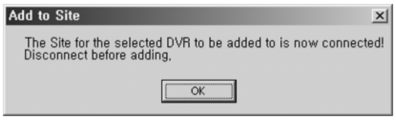


Modify Site

The modification of DVR information can be done in DVR list!

- To add a DVR(SHR-2040/2041/2042) to the site

- If you press the [Add] button, the DVR(SHR-2040/2041/2042) selected in the DVR list is added to the site selected in the site list.
- You can add up to 14 DVRs (SHR-2040/2041/2042) to one site, and you also can delete the DVRs that compose the site from the site list.
- If you press the [Add] button unless a site is registered in the site list, a new site named “Site [0]” as a default is created and the DVR(SHR-2040/2041/2042) add to it.
- When the site to add a DVR (SHR-2040/2041/2042) is connected with the Smart Viewer, the following message box pops up and the addition of DVR(SHR-2040/2041/2042) to the site is impossible. Be sure to cut the connection between the DVR(SHR-2040/2041/2042) and the Smart Viewer before you add a DVR(SHR-2040/2041/2042).



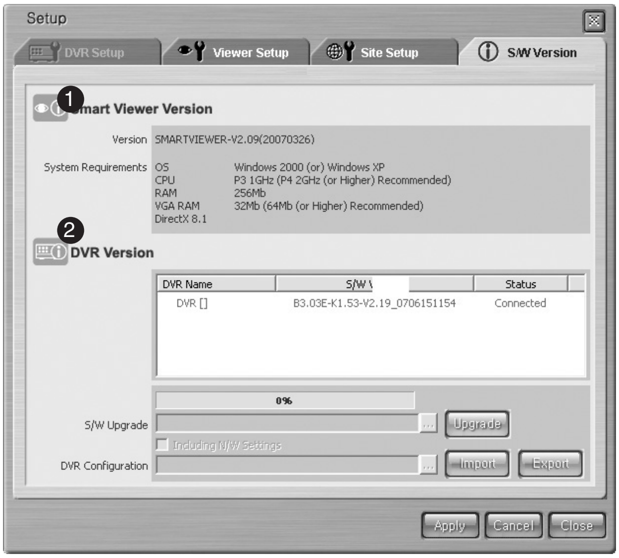
Add to Site

The Site for the selected DVR to be added to is now connected!
Disconnect before adding.

S/W Version

S/W Version

- If you press the [S/W Version] button, the smart viewer version, system requirements, and the version of DVR(SHR-2040/2041/2042) System S/W, being connected to the smart viewer, are displayed.
- You can upgrade the on-line DVR(SHR-2040/2041/2042) System S/W remotely. You are authorized with S/W upgrade in an Admin authority only. With the authority of user or without connecting with the DVR(SHR-2040/2041/2042), your access will be denied.


Setup
DVR Setup
Viewer Setup
Site Setup
S/W Version
1
Smart Viewer Version
2
DVR Version
Upgrade
Import
Export
Apply
Cancel
Close

Version SMARTVIEWER-V2.09(20070326)

System Requirements
OS Windows 2000 (or) Windows XP
CPU P3 1GHz (P4 2GHz (or Higher) Recommended)
RAM 256Mb
VGA RAM 32Mb (64Mb (or Higher) Recommended)
DirectX 8.1

DVR Name	S/W \	Status
DVR []	B3.03E-K1.53-V2.19_0706151154	Connected

0%

S/W Upgrade

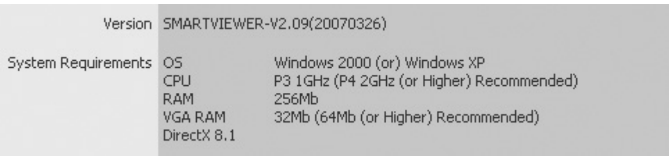
☐ Including N/W Settings

DVR Configuration

① Displays the smart viewer version and system requirements.

② Displays the version and name of DVR if any DRV(SHR-2160/2162/2080/2082) is being connected with the Smart Viewer. This area can also provide functions for remotely upgrading the DVR software, extracting, and recovering the DVR settings.

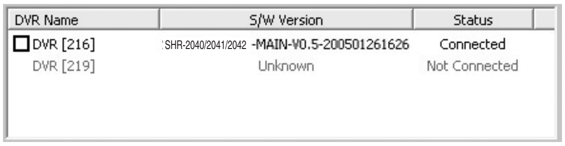
- Smart Viewer Version



Version	SMARTVIEWER-V2.09(20070326)	
System Requirements	OS	Windows 2000 (or) Windows XP
	CPU	P3 1GHz (P4 2GHz (or Higher) Recommended)
	RAM	256Mb
	VGA RAM	32Mb (64Mb (or Higher) Recommended)
	DirectX 8.1	

- Smart Viewer Version and system requirements are displayed.

- DVR Version



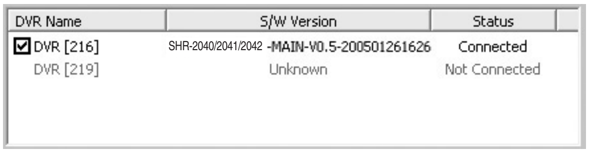
DVR Name	S/W Version	Status
☐ DVR [216]	SHR-2040/2041/2042 -MAIN-V0.5-200501261626	Connected
DVR [219]	Unknown	Not Connected

- DVR Version not only displays the connected DVR(SHR-2040/2041/2042) name if any DVR(SHR-2040/2041/2042) is being connected with Smart Viewer or the name of DVR(SHR-2040/2041/2042) composing a site if any DVR(SHR-2040/2041/2042) is being connected with the site but also displays DVR(SHR-2040/2041/2042) S/W version.
- When the smart viewer does not connected with the DVR(SHR-2040/2041/2042), it displayed with a gray and “Not connected” is displayed in the status.
- Each DVR Version has a check box, which is used for S/W Upgrade.

- DVR(SHR-2040/2041/2042) S/W Upgrade

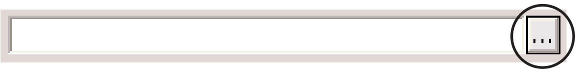
- Smart Viewer upgrades on-line DVR(SHR-2040/2041/2042) S/W remotely.

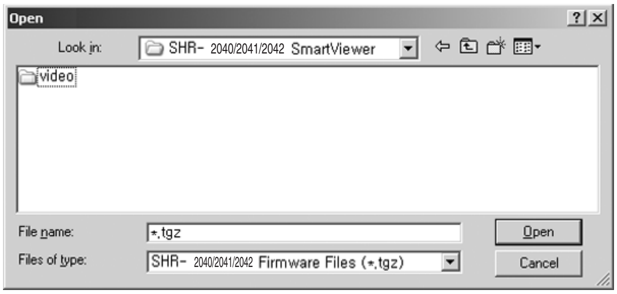
① Select a DVR(SHR-2040/2041/2042) to be upgraded among DVRs(SHR-2040/2041/2042) on line.



DVR Name	S/W Version	Status
☑ DVR [216]	SHR-2040/2041/2042 -MAIN-V0.5-200501261626	Connected
DVR [219]	Unknown	Not Connected

② Click the following button to open the “SHR-2040/2041/2042 Firmware” file in format.



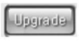


Look in: SHR- 2040/2041/2042 SmartViewer

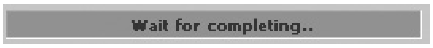
File name: *.tgz

Files of type: SHR- 2040/2041/2042 Firmware Files (*.tgz)

③ Press the [Upgrade] button to transmit a file to the selected DVR(SHR-2040/2041/2042) and start the upgrade of DVR (SHR-2040/2041/2042) S/W.



④ The progress of file transmission and upgrade is displayed at the bottom.



Wait for completing..

Caution

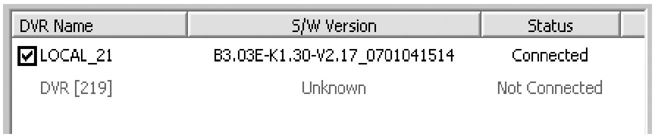
Be sure to suspend all the DVR system functions in action such as recording, MENU, backup, and playback before you upgrade the DVR(SHR-2040/2041/2042) S/W.
Never try to turn the DVR(SHR-2040/2041/2042) power off during the S/W upgrade.
The S/W upgrade requires about 5 minutes.
If the S/W upgrade is suspended accidentally, the previous S/W will be left intact.

Note

The new Firmware necessary for DVR(SHR-2040/2041/2042) S/W upgrade should be downloaded from the CCTV Part in Products Section at the http://www.samsung.com

- Extracting the settings for DVR(SHR-2160/2160/2080/2082)
  - SmartViewer enables you to extract the menu settings for the connected DVR(SHR-2160/2160/2080/2082).

    ① Select the DVR you want to extract the setting values from.

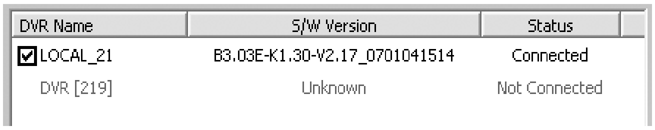


DVR Name	S/W Version	Status
☑ LOCAL_21	B3.03E-K1.30-V2.17_0701041514	Connected
DVR [219]	Unknown	Not Connected

② Press the [Export] button to specify the file name (*.dat), then the setting values can be saved on your PC.

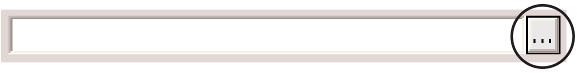
- Recovering the menu setting values for DVR(SHR-2160/2160/2080/2082)
  - SmartViewer enables you to restore the menu settings for the connected DVR(SHR-2160/2160/2080/2082).

    ① Select the DVR you want to restore the setting values.



DVR Name	S/W Version	Status
☑ LOCAL_21	B3.03E-K1.30-V2.17_0701041514	Connected
DVR [219]	Unknown	Not Connected

② Click the button as shown below to open a menu setup file (*.dat).



③ Press the [Import] button to transfer the setup file to the selected DVR. Then the menu settings are recovered.

④ When you restore the settings, click the following checkbox to recover the network settings if necessary.

☐ Including N/W Settings

Note

Import/Export function does not affect for the Motion Detection Setup Area and Record Schedule.

Appendix

1

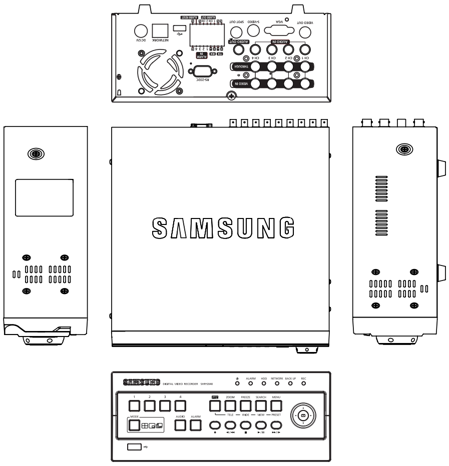
Product Specification

<table>
<tr><th colspan="2">Item</th><th>Details</th><th>Remarks</th></tr>
<tr><td colspan="2">OS</td><td>Embedded OS</td><td></td></tr>
<tr><td colspan="2">Broadcasting</td><td>NTSC/PAL System</td><td></td></tr>
<tr><td colspan="2">Input Voltage</td><td>2040-DC 12V, AC 110-220(NTSC),
AC 100-230(PAL)
2041/2042 - AC 110-220(NTSC)
AC 100-230(PAL)</td><td></td></tr>
<tr><td colspan="2">Power Consumption</td><td>2040 : 30Watt, 2041 : 60Watt, 2042 : 51Watt</td><td></td></tr>
<tr><td rowspan="2">Video</td><td>Video Input</td><td>Composite 4 Channel
- 1.0Vp-p
- 75Ω Hi Z Termination
BNC Type
Loop Through Out 4 Channel
- Auto Termination</td><td></td></tr>
<tr><td>Video Output</td><td>Composite 2 Channel
- Normal Video Output 1 Channel
- Spot Output 1 Channel
- BNC Type
S-Video 1 Channel
- 1.0Vp-p
VGA 1 Channel</td><td></td></tr>
<tr><td rowspan="2">Audio</td><td>Audio Input</td><td>Mono 4 Channel
- -5dBm, 600Ω
RCA Type</td><td></td></tr>
<tr><td>Audio Output</td><td>Mono 1 Channel
- -6dBm
RCA Type</td><td></td></tr>
<tr><td rowspan="2">Live Monitoring</td><td>Video size & Frame Rate</td><td><table><tr><th>Video size</th><th>Frame Rate (1Ch/4Ch)</th></tr><tr><td>720X480 (NTSC)
720X576 (PAL)</td><td>30fps/480fps(NTSC)
/25fps/100fps(PAL)</td></tr></table></td><td></td></tr>
<tr><td>Display Mode</td><td>Single
4 Split
PIP
Mode sequence
Freeze
2 X Zoom</td><td></td></tr>
</table>

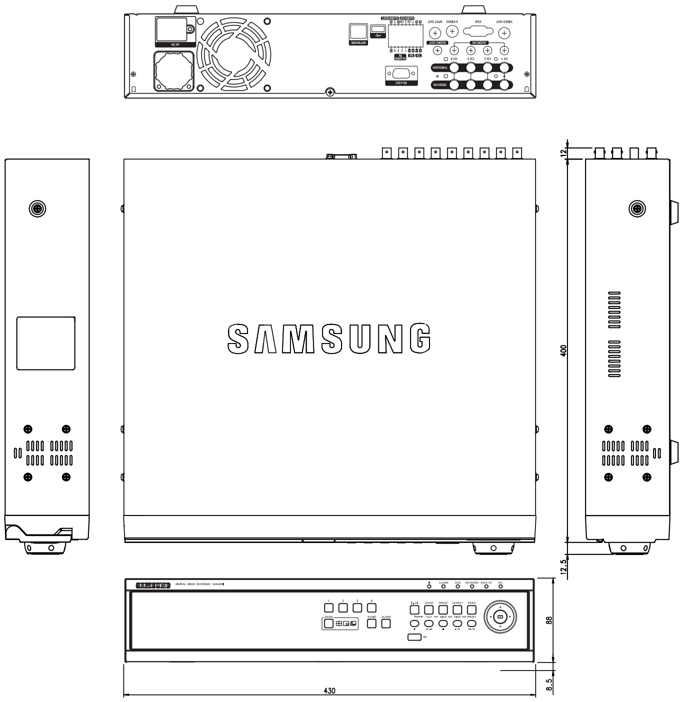
<table>
<tr><th colspan="2">Item</th><th>Details</th><th>Remarks</th></tr>
<tr><td rowspan="4">Recording</td><td>Compression Method</td><td>Video : MPEG4
Audio : ADPCM</td><td></td></tr>
<tr><td>Video Size & Performance</td><td>
<table>
<tr><th>Resolution</th><th>Quality Level</th><th>Max Image Rate</th></tr>
<tr><td>CIF(C)
352X240(NTSC)
/352X288(PAL)</td><td>Very High
High
Standard
Low</td><td>30.00ips(NTSC)/
25.00ips(PAL)</td></tr>
<tr><td>Half D1(N)
720X288(NTSC)
/720X288(PAL)</td><td>Very High
High
Standard
Low</td><td>15.00ips(NTSC)/
12.50ips(PAL)</td></tr>
<tr><td>Full D1(L)
720X480(NTSC)
/720X576(PAL)</td><td>Very High
High
Standard
Low</td><td>30.00ips(NTSC)/
25.00ips(PAL)</td></tr>
</table>
</td><td></td></tr>
<tr><td>Recording Mode</td><td>Normal → REC Key
Schedule → Schedule Table
Event
-Alarm Detection
-Motion Detection
-Video Loss
-Pre & Post Recording</td><td></td></tr>
<tr><td>Time Laps</td><td>NTSC : 1.00ips/3.00ips/5.00ips/7.50ips/10.00ips/15.00ips
PAL : 1.00ips/2.50ips/5.00ips/6.25ips/8.33ips/12.50ips/25.00ips</td><td></td></tr>
<tr><td rowspan="2">Storage Capacity</td><td>Internal</td><td>SHR-2040 : ATA HDD x 2(MAX)
-MAX HDD Size: 500GB x 2 = 1TB
SHR-2041 : ATA HDD x 4(MAX)
-MAX HDD Size: 500GB x 4 = 2TB
SHR-2042 : ATA HDD x 3(MAX)
-MAX HDD Size: 500GB x 3 = 1.5TB</td><td></td></tr>
<tr><td>External</td><td>USB HDD
-MAX 1 (Not support USB hub)
-MAX HDD Size : 500GB</td><td></td></tr>
</table>

<table>
<tr><th colspan="2">Item</th><th>Details</th><th>Remarks</th></tr>
<tr><td rowspan="4">Play Back</td><td>Search Mode</td><td>Calendar
Event
- Normal, Schedule, Alarm, Motion, Video Loss
Date/Time
Go to First
Go to Last
Backup Data</td><td></td></tr>
<tr><td>Video size & Performance</td><td><table>
<tr><th rowspan="2">Video size</th><th colspan="2">Decoding Performance</th></tr>
<tr><th>1Ch Mode</th><th>4Ch Mode</th></tr>
<tr><td>CIF</td><td>30.00ips(NTSC)/25.00ips(PAL)</td><td>30.00ips(NTSC)/25.00ips(PAL)/1CH</td></tr>
<tr><td>Half D1(N)</td><td>30.00ips(NTSC)/25.00ips(PAL)</td><td>15.00ips(NTSC)/12.50ips(PAL)/1CH</td></tr>
<tr><td>Full D1(L)</td><td>30.00ips(NTSC)/25.00ips(PAL)</td><td>Not supported by SHR-2040/2041/2042</td></tr>
</table>Full D1 is supported in the 1 ch mode only</td><td></td></tr>
<tr><td>Display Mode</td><td>Single → 1Channel Decoding
4 Split → 4Channel Decoding
PIP → 1Channel Decoding + 1Channel Live
6 Split → PB(Single)+4 Channel Live
- Single→ 6 Split(1CH PB)→PIP→4 Split
9 Split → PB(4 Split)+4 Channel Live
- 4 Split→ 6 Split(4CH PB)→4 Split</td><td></td></tr>
<tr><td>Play Mode</td><td>Play, Pause, Stop, 2x Digital Zoom
Fast Forward/Fast Reverse
- 2x, 4x, 8x, 16x, 32x, 64x</td><td></td></tr>
<tr><td colspan="2">Backup</td><td>USB External HDD
USB CD/DVD Writer
USB Flash Memory</td><td></td></tr>
<tr><td colspan="2">Alarm</td><td>Input : 4 Input
- 5mA
Output : 2 Relay Output
- 2A/30VDC, 0.5A/125VAC
Reset : 1 Input
- 5mA</td><td></td></tr>
<tr><td colspan="2">Network</td><td>Ethernet : 10/100 Base T, ADSL(PPPoE), DHCP</td><td></td></tr>
<tr><td colspan="2">Serial I/F</td><td>RS-485 → PTZ Device Control, Remote Control Device</td><td></td></tr>
<tr><td rowspan="3">Remote Viewer</td><td>PC Spec.</td><td>CPU : Pentium III, 1GHz or higher
RAM : SDRAM 256MB or higher
Graphic Accelerator : Graphic Memory 32MB or higher
DirectX : 8.1 or higher</td><td></td></tr>
<tr><td>Support OS</td><td>Win2000, WinXP</td><td></td></tr>
<tr><td>Function</td><td>Live Image Monitoring Mode
Local File Search & Play Back Mode
Remote File Search & Play Back Mode</td><td></td></tr>
<tr><td colspan="2">Operation Temp.</td><td>0°C to 40°C (32°F to 104°F)</td><td></td></tr>
<tr><td colspan="2">Preservation Temp.</td><td>-20°C to 60°C (-4°F to 140°F)</td><td></td></tr>
<tr><td colspan="2">Operation Humidity</td><td>20% ~ 85% RH</td><td></td></tr>
<tr><td colspan="2">Preservation Humidity</td><td>20% ~ 85% RH</td><td></td></tr>
<tr><td colspan="2">Size</td><td>215(W) X 88(H) X 337(D) (2040)
430(W) X 88(H) X 400(D) (2041/2042)</td><td></td></tr>
<tr><td colspan="2">Weight</td><td>About 3.35Kg(2040)/About 6.5Kg(2041)/About 7.3Kg(2042)</td><td></td></tr>
</table>

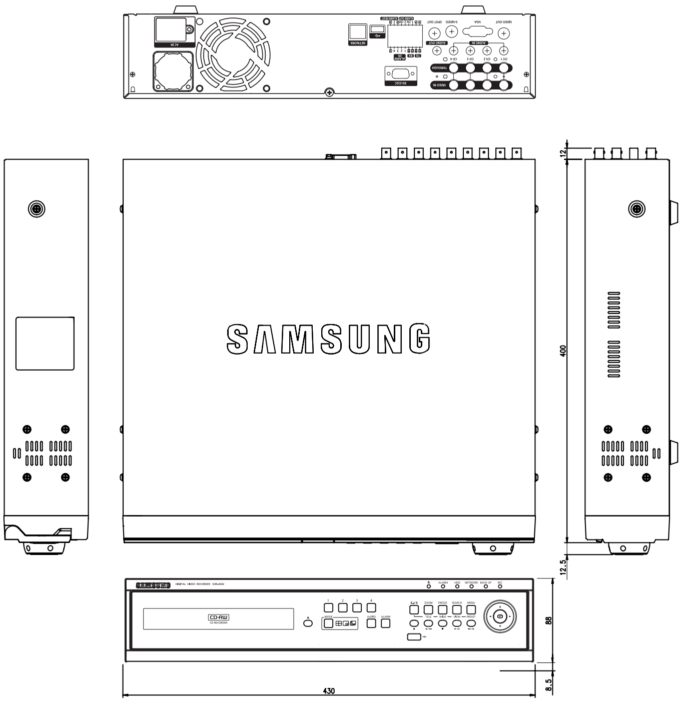
2 Outline Drawings



[SHR-2040]


SAMSUNG
12
400
12.5
88
8.5
430

[SHR-2041]


SAMSUNG
12
400
12.5
88
8.5
430
CD-RW

[SHR-2042]

3 Factory Default

This restores the Network information and preset values in SHR-2040/2041/2042 to the original state at the time of factory shipment.

Factory Default will be done as follows;

- Use System / Load Factory Default in MENU or,
- If you hold on to the Mode button in Live Mode and keep pressing the CH2 button for 5 seconds, the system will return to the Factory default condition. The front button repeats the flickering.

Classification	Detailed Items		Factory Setup
System Setup	Time/Date/Language	Date Format	YYYY-MM-DD
		Time Format	24 Hours
		Language	English
		Summer Time	Off
	Password	Password	4321
		Password Lock	On
	HDD Mode	Disk End Mode	Overwrite
		Disk End Beep	Off
Camera Setup	Camera Config	Video	On
		Audio	Off
		Title	CAM_01 ~ CAM_4
		Auto Seq.	5 sec
	PTZ Device	ID	Camera No.
		Protocol	None
		Baudrate	9600
		Parity	None
		Data	8
		Stop	1
		Serial Mode	Half Duplex
	Screen Setup	Brightness	50
		Contrast	50
		Color	50

Classification	Detailed Items		Factory Setup
Monitoring	Event Monitoring OSD Display	Duration	Off
		Date	On
		Time	On
		Title	On
		Status	On
	Spot Out Channel		CH1
	Spot Out Event Monitor		Off
	Monitor Out		Composite Out
	1CH DVR Support		Off
Record Mode Setup	Mode		On
	Video Size		CIF
	Quality		Standard
	Rate		30ips(NTSC)/25ips(PAL)
Record Schedule	Continuous Recording		Off
	Event Recording		On
Event Record Setup	Event Record Mode	Video Size	CIF
		Video Size	Normal
		Rate	30ips(NTSC)/25ips(PAL)
		PreEvent	Off
		PostEvent	Off
	Alarm Detection Setup	Sensor State	Off
		Camera	Camera No.
		Alarm-Out	None
		Duration	10 sec
	Motion Detection Setup	M.D State	Off
		Area	All Area
		Sensitivity	High
		Alarm-Out	None
		Duration	10 sec
	Video Loss Detection Setup	Video Loss Detection Setup	Off
		Alarm-Out	None
		Duration	10 sec

Classification	Detailed Items		Factory Setup
Network	IP Settings	Connection Mode	Static IP
		Bandwidth	2Mbps
		Admin Password	4321
		User Password	4321
		IP	192.168.001.200
		Gateway	192.168.001.001
		Subnet Mask	255.255.255.000
		DNS	168.126.063.001
		ADSL User ID	ID
		Password	-
	Transfer Protocol Settings	Protocol type	UDP
		Port(TCP)	0554.0555.0556.0557
		Port(UDP)	8000-8159
		Unicast / Multicast	Unicast
		Multicast IP	224.126.063.001
		TTL	005
		DDNS Site	Off
		Host Name	-
		User Name	-
		User Password	-
	Callback Settings	On / Off	Off
		IP Address	192.168.001.010
		Port(UDP)	7900
		Retry	05
		Transfer Alarm In	Off
		Transfer Motion Detection	Off
		Transfer Video Loss	Off
		Transfer System Log	Off

4

SHR-2040/2041/2042 Smart Viewer Frame Specification for the Playback

NTSC

FRAME RATE	Viewer Screen Split Mode	VIDEO SIZE	
15		Half D1(N)	CIF (C)
	Nine-split	1 frame/sec	15 frame/sec
	Fore-split	15 frame/sec	15 frame/sec
	Single	15 frame/sec	15 frame/sec
10		Half D1(N)	CIF (C)
	Nine-split	10 frame/sec	10 frame/sec
	Fore-split	10 frame/sec	10 frame/sec
	Single	10 frame/sec	10 frame/sec
7.5		Half D1(N)	CIF (C)
	Nine-split	7.5 frame/sec	7.5 frame/sec
	Fore-split	7.5 frame/sec	7.5 frame/sec
	Single	7.5 frame/sec	7.5 frame/sec
5		Half D1(N)	CIF (C)
	Nine-split	5 frame/sec	5 frame/sec
	Fore-split	5 frame/sec	5 frame/sec
	Single	5 frame/sec	5 frame/sec
3		Half D1(N)	CIF (C)
	Nine-split	3 frame/sec	3 frame/sec
	Fore-split	3 frame/sec	3 frame/sec
	Single	3 frame/sec	3 frame/sec
1		Half D1(N)	CIF (C)
	Nine-split	1 frame/sec	1 frame/sec
	Fore-split	1 frame/sec	1 frame/sec
	Single	1 frame/sec	1 frame/sec

PAL

FRAME RATE	Viewer Screen Split Mode	VIDEO SIZE	
12.5		Half D1(N)	CIF (C)
	Nine-split	1 frame/sec	12.5 frame/sec
	Fore-split	12.5 frame/sec	12.5 frame/sec
	Single	12.5 frame/sec	12.5 frame/sec
8.33		Half D1(N)	CIF (C)
	Nine-split	8.33 frame/sec	8.33 frame/sec
	Fore-split	8.33 frame/sec	8.33 frame/sec
	Single	8.33 frame/sec	8.33 frame/sec
6.25		Half D1(N)	CIF (C)
	Nine-split	6.25 frame/sec	6.25 frame/sec
	Fore-split	6.25 frame/sec	6.25 frame/sec
	Single	6.25 frame/sec	6.25 frame/sec
5		Half D1(N)	CIF (C)
	Nine-split	5 frame/sec	5 frame/sec
	Fore-split	5 frame/sec	5 frame/sec
	Single	5 frame/sec	5 frame/sec
2.5		Half D1(N)	CIF (C)
	Nine-split	2.5 frame/sec	2.5 frame/sec
	Fore-split	2.5 frame/sec	2.5 frame/sec
	Single	2.5 frame/sec	2.5 frame/sec
1		Half D1(N)	CIF (C)
	Nine-split	1 frame/sec	1 frame/sec
	Fore-split	1 frame/sec	1 frame/sec
	Single	1 frame/sec	1 frame/sec

Note

The play frame specification of Smart Viewer varies on the setup of SHR-2040/2041/2042 Recording Rate and Video Size or the screen split mode of Smart Viewer. The above specification is applicable only when the main body of SHR-2040/2041/2042 is connected with a fast network like LAN. When the main body of SHR-2040/2041/2042 is connected with a slow network like ADSL, the play speed will be 0.5 Frame/sec. In addition, the above specification has been defined to the recommended specification of your PC. If your PC specification is lower than the recommended, the number of frame to played may diminish.

5 Troubleshooting(FAQ)

1. The system power is dead and LED in front of the system does not operate at all.
   - Please check the power connection.
   - Check the power voltage.
   - If all your efforts like above end up with nothing, check or exchange the power supply.

2. Video data remains in the system but some channels displays no video data but turns all blue.
   - Check the image of the camera connected to the system. Improper input of camera input may cause this symptom.
   - Check the camera power supply.
   - Sometimes, you see this symptom when the video data is connected with multisystems and the video signal from the video data distributor in use feels weak. If it's the case, you shall connect the camera images with SHR-2040/2041/2042 DVR directly to check or improve such a symptom.

3. The REC button in front has no effect on turning on REC LED or recording process.
   - Please check the HDD space.
   - Please check the Record Mode setup in MENU. It should be On.

4. All the front LEDs are in operation but the monitor remains black.
   - Video out may come out differently with the connected monitor. In short, Video Out is set to Composite Output but connected to VGA Input Monitor or vice versa. Then, keep pressing both the "MODE" button and the "1" button on the left for 5 seconds to change the Video Out mode.

5. The front LED blinks and the logo screen repeatedly appears.
   - This symptom may be resulted from failure of HDD connection inside SHR-2040/2041/2042 DVR. Take off the cover and check HDD connection status. If HDD connection has no problem, please consult with the shop where you bought SHR-2040/2041/2042 DVR.

6. You cannot enter MENU by forgotten password.
   - If you forget the password, you shall reset SHR-2040/2041/2042 DVR to the values set at the factory. Keep pressing both the "MODE" button and the "2" button on the left for 5 seconds The password default is "4321".

7. The channel button does not operate in Live.
   - If the current screen is Event Monitoring, the channel button does not operate. Then, press the Alarm button to terminate the current screen and select a channel.

8. The cursor cannot reach Start during Calendar Search.
   - Please check both the channel and the date for play are left checked. Both shall be checked for play with Start. The cursor cannot reach the unrecorded date.

9. Alarm, once issued, keeps being issued though you press the front Alarm button for cancellation.
   - Press the front Menu button to cancel Alarm as follows.
     1) To cancel Event Monitoring Screen : Monitoring-Event Monitoring Duration Off
     2) To cancel Buzzer : Event Record-Alarm (Motion Detection/Video Loss).
        Alarm-Out.
     3) To cancel Event : Event Record-Alarm (Motion Detection/Video Loss).
        State Off.

10. Pressing the PTZ button in Live receives no response.
    - Check the Protocol and other setup values through Menu → Camera → PTZ Device match with the PTZ camera.

11. When you connect several IEEE1394 armored HDDs to SHR-2040/2041/2042 DVR through Menu, SHR-2040/2041/2042 DVR cannot recognize all the HDDs.
    - It requires time to recognize several armored HDDs. Please try again in a few minutes. If retrial makes no improvement, HDD could be abnormal. Please exchange the HDD.

12. “CLOCK BATTERY HAS FAILED” is displayed on the screen.
    This message is displayed if the internal clock in DVR has problem.
    DVR will not work in order to protect recorded data in HDDs.
    Please consult with an expert who works for the shop where you bought the product.

13. You cannot connect to SHR-2040/2041/2042 DVR through Smart View.
    - Check if 3 Smart Viewer users are in connection with SHR-2040/2041/2042 DVR. SHR-2040/2041/2042 DVR allows no more than 3 users’ connection with Smart Viewer at a time.
    - Check the Network setup of SHR-2040/2041/2042 DVR.
    - Check Network cable connection.
    - When you use DHCP/ADSL(PPPoE) for connection, please check if you get the right SHR-2040/2041/2042 DVR MAC Address.
    - If SHR-2040/2041/2042 DVR is connected to the ADSL network, please check if Bandwidth is set below 600 Kbps. If the Bandwidth for ADSL is set to high, the connection with Smart Viewer may be instable due to the heavy network load as the ADSL speed is low.

14. Smart Viewer in operation is disconnected.
    - If you change time, network setup, HDD format, Default Setup, or HDD attachment or detachment for SHR-2040/2041/2042 DVR, the current Smart Viewer will be automatically disconnected.
    - Check network connection. Smart Viewer, if disconnected from Network, will try reconnection up to 5 times. If it remains unconnected after 5 time trial, it will automatically give up connection.
    - As far as SHR-2040/2041/2042 DVR is connected to the ADSL network, you may be disconnected from Smart Viewer when the network conditions goes bad.

15. The Audio icon of Smart Viewer is left inactivated in the Live mode. Setting Audio to On in the Camera menu of SHR-2040/2041/2042 DVR will make no difference.
    - If your PC has no Audio driver or has some problem with Audio play of an Audio driver, the Audio icon will be inactivated. Please check Audio driver installation status.

16. When selecting the channel which PTZ Camera is connected to in the Live mode of Smart Viewer, click the “Menu Control” button among PTZ setup buttons to enter the Function Menu mode in PTZ Camera, and return from the other channel, the PTZ related buttons have been initialized.
    - PTZ control is available in both Smart Viewer and SHR-2040/2041/2042 DVR. Other user might control PTZ for SHR-2040/2041/2042 DVR to terminate the PTZ Camera Menu or Auto Pan/Scan/Pattern motions while you select the other channel. This may cause the initialization.

17. No Time Bar in the Search
    - Time Line can be converted into 2 modes, General(24 Hour Display) and Extension(2 Hour Display). In the Extension mode, Time Bar may not be seen in the current time. Please enter the General mode or click the LEFT or RIGHT button to search Time Bar.

18. “NO HDD” icon and error message pops up.
    - Please check the HDD connection status. If this problem persist without connection failure, contact the technical support for checking hard disk.

19. DVR device does not show what has been upgraded after adding a hard disk.
    - Make sure that the additional external HDD installed is one of the devices listed on the compatibility list of HDDs. The list of the compatible devices with Samsung DVR can be obtained from your vendor.

20. The connection status is not shown after connecting the external storage device, USB memory, USB HDD and such.
    - Make sure that the external storage device installed is one of the storage devices listed on the compatibility list of storage devices. The list of the compatible devices with Samsung DVR can be obtained from your vendor.

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Version 2.1, February 1999

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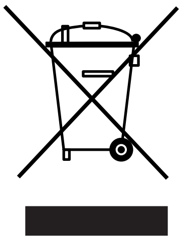

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